

Rocky Branch Monitoring Sites

Monitoring Data Summary for October 3rd, 2019 – November 6th, 2019

Data Gaps

- Heavy sediment accumulation at the ROCA station covered the turbidity sensor resulting in inaccurate turbidity readings beginning on October 16th. The sediment was cleared up on October 18th. This brief period of turbidity data was deleted from the dataset.
- No interruptions were observed in the water quality data at the ROCB station during this monitoring period.

SCDHEC Standards

- Both the ROCA and ROCB stations recorded pH values that were within the acceptable SCDHEC range of 6 to 8.5 during this monitoring period.
- The ROCA and ROCB stations recorded average DO concentrations of 6.4 mg/L and 8.1 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 4.3 mg/L at ROCA and 6.3 mg/L at ROCB. Neither of the Rocky Branch monitoring stations recorded DO values below the SCDHEC discrete minimum standard of 4 mg/L.

Storm Events

- The ROCA station recorded 7 storm events during this monitoring period, resulting in 3.1 inches of total precipitation. The ROCB station also recorded 7 storm events during this monitoring period, resulting in 2.7 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 12.8 days in the Rocky Branch watershed occurring prior to the October 13th storm event.

Potential Illicit Discharges and Abnormal Events

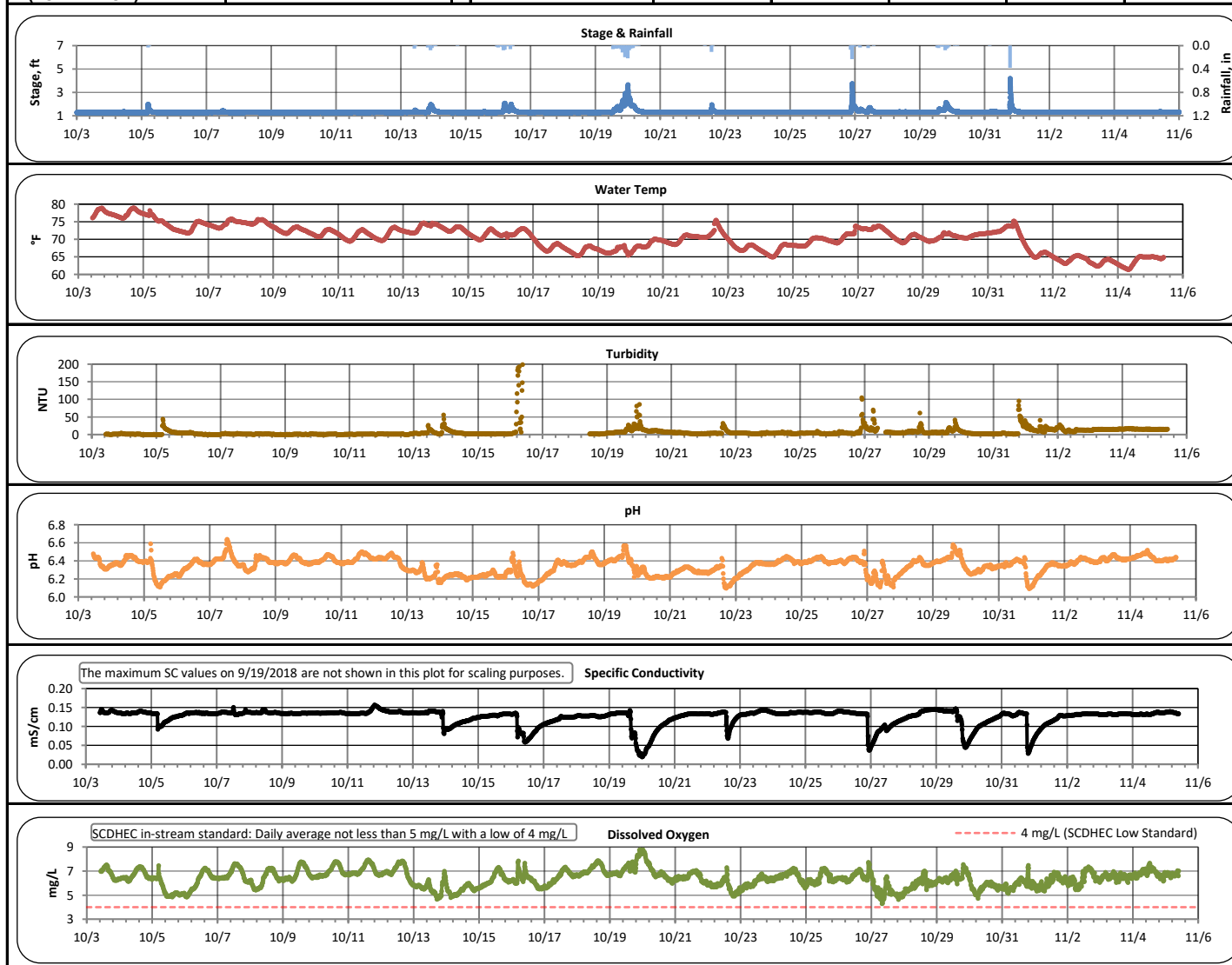
- The Rocky Branch monitoring stations did not experience any potential illicit discharges or abnormal activity during this monitoring period.

Flow Measurements

- No flow measurements were taken at the ROCA or ROCB stations during this monitoring period.

Rocky Branch A (October 3, 2019 - November 6, 2019)

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	4.2	1.3	1.3	0.2
LOCATION:	Maxcy Gregg Park	TEMPERATURE (°F):	61	79	71	70	4
ADDRESS:	1650 Park Circle Columbia, SC 29201	TURBIDITY (NTU):	1	200	4	8	13
COORDINATES:	33.995864, -81.021842	pH:	6.1	6.6	6.4	6.3	0.1
TMDL/IMPAIRMENT:	Fecal Coliform	SPECIFIC CONDUCTIVITY (mS/cm):	0.020	0.16	0.134	0.125	0.022
NEIGHBORING LANDUSE:	Residential and commercial	DISSOLVED OXYGEN (mg/L):	4.3	8.8	6.4	6.4	0.7
SPATIAL LOCATION:	Most upstream site						
TOTAL NO. STORMS OVER 0.1 INCH:	7						
MAX. DAILY RAINFALL:	0.9 inches						
TOTAL RAINFALL (FOR PERIOD):	3.1 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 (October 3, 2019 - November 6, 2019)

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.

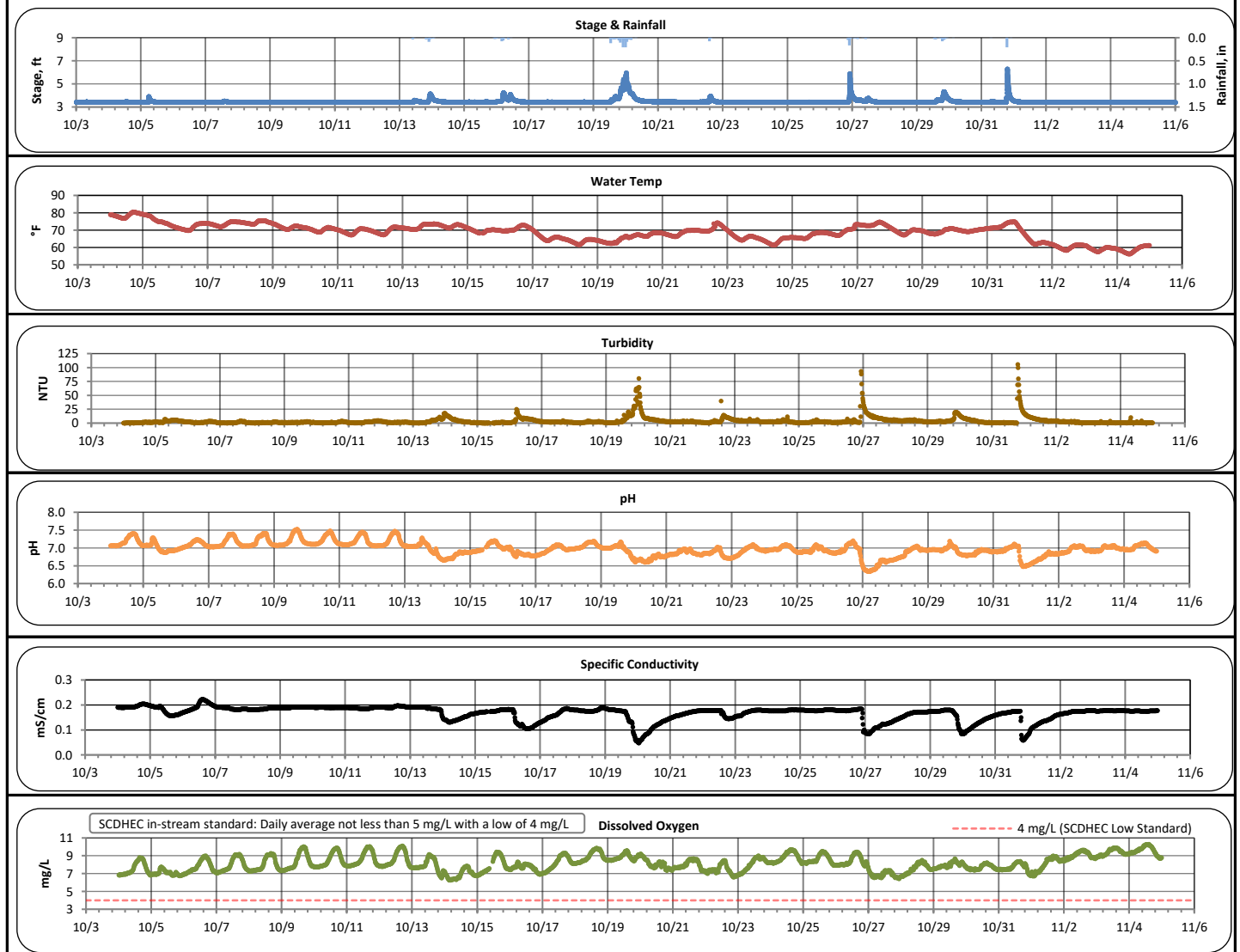
Grab Sample Data:

Analyte (units)	Sample 1		Sample 2		Sample 3		Sample 4	
	10/7/2019		10/29/2019		10/29/2019			
	Time	Result	Time	Result	Time	Result	Time	Result
<i>Escherichia coli</i> (MPN/100mL)	11:25	700	15:18	6,896	16:09	6152		
Total Suspended Solids (mg/L)								
Total Phosphorus (mg/L)								
Total Nitrogen (mg/L)								

Note: Sample 1 was collected during dry weather conditions. Samples 2 and 3 were taken during wet weather conditions.

Rocky Branch B (October 3, 2019 - November 6, 2019)

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	6.3	3.4	3.5	0.2
LOCATION:	Olympia Ave Crossing	TEMPERATURE (°F):	56	81	70	69	5
ADDRESS:	510 Heyward St Columbia, SC 29201	TURBIDITY (NTU):	1	106	2	4	7
COORDINATES:	33.982578, -81.035036	pH:	6.3	7.5	7.0	7.0	0.2
TMDL/IMPAIRMENT:	Fecal Coliform	SPECIFIC CONDUCTIVITY (mS/cm):	0.048	0.223	0.177	0.167	0.029
NEIGHBORING LANDUSE:	Residential and commercial	DISSOLVED OXYGEN (mg/L):	6.3	10.3	8.1	8.1	0.9
SPATIAL LOCATION:	Most Downstream Site						
TOTAL NO. STORMS OVER 0.1 INCH:	7						
MAX. DAILY RAINFALL:	1.0 inches						
TOTAL RAINFALL (FOR PERIOD):	2.7 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 B (October 3, 2019 - November 6, 2019)

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	
	10/7/2019		10/29/2019		10/29/2019			
	Time	Result	Time	Result	Time	Result	Time	Result
<i>Escherichia coli</i> (MPN/100mL)	11:39	506	15:35	422	16:20	1074		
Total Suspended Solids (mg/L)								
Total Phosphorus (mg/L)								
Total Nitrogen (mg/L)								

Note: The sample on 10/7 was collected during dry weather conditions. The samples on 10/29 were taken during wet weather conditions.