Rocky Branch Monitoring Sites Monitoring Data Summary for August 29th, 2019 – October 2nd, 2019

Data Gaps

- At the ROCA station, a brief period of fouling turbidity data, occurring September 14th-16th, was removed from the dataset.
- No interruptions were observed in the water quality data at the ROCB station during this monitoring period.
- The website experienced reporting issues with the pressure transducers at ROCA and ROCB from September 7th-8th, therefore there is no CS451 stage data for that brief period.
- The ROCA pressure transducer experienced issues requiring a new pressure transducer to be installed on September 26th. Therefore, there is no CS451 stage data from September 16th-26th.

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 6.7 mg/L and 7.6 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 4.4 mg/L at ROCA and 4.6 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 3 storm events during this monitoring period, resulting in 2.3 inches of total precipitation. The ROCB station also recorded 3 storm events during this monitoring period, resulting in 2.5 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 17.0 days in the Rocky Branch watershed occurring before the storm event on September 30th.

Potential Illicit Discharges and Abnormal Events

- Two different abnormal events took place at the ROCA station impacting water quality:
 - On September 4th, specific conductivity and pH increased with no corresponding rainfall event.
 - On September 19th, significantly increased specific conductivity, pH, and temperature, and subsequently slightly elevated turbidity levels were observed. No rainfall occurred during this time.
- At the ROCB station, on September 20th, specific conductivity significantly increased with no corresponding rainfall event.

Flow Measurements

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





Rocky Branch A (August 29, 2019 -- October 2, 2019)



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

Rocky Branch A (August 29, 2019 -- October 2, 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	
	9/4/2019							
	Time	Result	Time	Result	Time	Result	Time	Result
Escherichia coli (MPN/100mL)	10:24	270						
Total Suspended Solids (mg/L)								
Total Phosphorus (mg/L)								
Total Nitrogen (mg/L)								

Note: This sample was collected during dry weather conditions.





Rocky Branch B (August 29, 2019 -- October 2, 2019)



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

Rocky Branch B (August 29, 2019 -- October 2, 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	
	9/4/2019							
	Time	Result	Time	Result	Time	Result	Time	Result
Escherichia coli (MPN/100mL)	10:38	196						
Total Suspended								
Solids (mg/L)								
Total Phosphorus (mg/L)								
Total Nitrogen (mg/L)								

Note: This sample was collected during dry weather conditions.