Rocky Branch Monitoring Sites Monitoring Data Summary for March 21st, 2019 – April 24th, 2019

Data Gaps

- At the ROCA station, a period of turbidity data, occurring March 29th-April 1st, was removed from the dataset due to sensor fouling.
- There were no interruptions 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 8.0 mg/L and 8.3 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 6.3 mg/L at ROCA and 5.2 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 9 storm events during this monitoring period and resulted in 3.4 inches of total precipitation. The ROCB station also recorded 8 storm events during this monitoring period and resulted in 3.3 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 16.7 days at both Rocky Branch stations, occurring before the March 25th storm event.

Potential Illicit Discharges and Abnormal Events

- At the ROCA station, there were two potential illicit discharge occurrences observed during this deployment that impacted water quality.
 - On April 10th, specific conductivity, pH, and turbidity increased significantly with no rainfall recorded during that time.
 - On April 11th, specific conductivity and pH increased significantly with no rainfall recorded during that time.
- Several elevated specific conductivity levels occurred at the ROCB station during this monitoring period. These specific conductivity spikes took place on: March 23rd, 27th, 28th, April 2nd, 6th, 8th, 11th, 12th, 14th, 17th, 21st, 22nd-23rd.

Flow Measurements

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





Rocky Branch A (March 21, 2019 -- April 24, 2019)



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

Rocky Branch A (March 21, 2019 -- April 24, 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		Sample 5	
	3/21/2019		4/2/2019		4/2/2019		4/2/2019		4/18/2019	
	Time	Result	Time	Result	Time	Result	Time	Result	Time	Result
Escherichia coli (MPN/100mL)	10:33	150	10:05	4494	11:32	3560	12:33	6510	13:20	432
Total Suspended Solids (mg/L)			10:05	40	11:32	13	12:33	10.2		
Total Phosphorus (mg/L)			10:05	0.19	11:32	0.14	12:33	0.16		
Total Nitrogen (mg/L)			10:05	1.12	11:32	1.09	12:33	1.42		

Note: The samples collected on 3/21/2019 and 4/18/2019 were collected during dry weather conditions. The samples collected on 4/2/2019 were collected during a wet weather event.





Rocky Branch B (March 21, 2019 -- April 24, 2019)



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

Rocky Branch B (March 21, 2019 -- April 24, 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		Sample 5	
	3/21/2019		4/2/2019		4/2/2019		4/2/2019		4/18/2019	
	Time	Result	Time	Result	Time	Result	Time	Result	Time	Result
Escherichia coli (MPN/100mL)	10:16	452	9:38	4978	11:14	3808	12:22	4564	13:34	456
Total Suspended Solids (mg/L)			9:38	117	11:14	38	12:22	20		
Total Phosphorus (mg/L)			9:38	0.38	11:14	0.2	12:22	0.2		
Total Nitrogen (mg/L)			9:38	1.97	11:14	1.22	12:22	1.19		

Note: The samples collected on 3/21/2019 and 4/18/2019 were collected during dry weather conditions. The samples collected on 4/2/2019 were collected during a wet weather event.