Rocky Branch Monitoring Sites Monitoring Data Summary for September 27th, 2018 – October 31st, 2018

Data Gaps

- There were two different periods when the turbidity data became extremely noisy at the ROCA station during this deployment period and these periods were removed from the dataset.
- The pH at the ROCB station did not follow typical storm recovery patterns after the storm event on October 27th and the sensor may have been fouled. This portion of pH data was removed due to its inaccuracy.

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 7.2 mg/L and 8 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 4.7 mg/L at ROCA and 5.8 mg/L at ROCB, which are both above the SCDHEC discrete minimum standard of 4.0 mg/L.

Storm Events

- The ROCA station recorded 6 storm events during this monitoring period, resulting in 6.6 inches of total precipitation. The ROCB station recorded 7 storm events during this monitoring period, which resulted in 6.6 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 14.5 days at both Rocky Branch stations prior to the October 26th storm event.

Potential Illicit Discharges and Abnormal Events

- Abnormally high specific conductivity values were observed at the KINA site on October 30th when the sonde was being removed for calibrations. This high specific conductivity could likely be from the Maxcy Gregg pool.
- 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

High flow measurements were performed at ROCB on October 11th.





Rocky Branch A (September 27, 2018 -- October 31, 2018)



Rocky Branch A (September 27, 2018 -- October 31, 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		Sample 5	
	10/3/2018		10/10/2018		10/10/2018		10/11/2018		10/11/2018	
	Time	Result	Time	Result	Time	Result	Time	Result	Time	Result
Escherichia coli (MPN/100mL)	11:03	538	11:53	19,610	12:45	48,390	7:20	11,590	9:15	2,286
Total Suspended Solids (mg/L)			11:53	6.2	12:45	213	7:20	57	9:15	34.8
Total Phosphorus (mg/L)			11:53	0.1	12:45	0.33	7:20	0.12	9:15	0.009
Total Nitrogen (mg/L)			11:53	1.29	12:45	1.74	7:20	0.61	9:15	0.64

Note: Sample 1 was collected during dry weather conditions. Samples 2-5 were collected during wet weather conditions.





Rocky Branch B (September 27, 2018 -- October 31, 2018)



Rocky Branch B (September 27, 2018 -- October 31, 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:

Apolyto	Sample 1		Samp	ole 2	Sam	ole 3	Sample 4	
Analyte (upits)	10/3/2018		10/10	/2018	10/10	/2018	10/11/2018	
(units)	Time	Result	Time	Result	Time	Result	Time	Result
Escherichia coli (MPN/100mL)	10:50	808	12:12	5,818	13:05	15,400	7:02	17,330
Total Suspended Solids (mg/L)			12:12	43.2	13:05	98.8	7:02	95
Total Phosphorus (mg/L)			12:12	0.12	13:05	0.22	7:02	0.18
Total Nitrogen (mg/L)			12:12	1.94	13:05	3.4	7:02	0.94
Analyte (units)	Sample 5		Sample 6		Sample 7		Sample 8	
	10/11/2018		10/11/2018					
	Time	Result	Time	Result	Time	Result	Time	Result
Escherichia coli (MPN/100mL)	8:45	10,340	9:30	3,744				
Total Suspended Solids (mg/L)	8:45	65	9:30	102				
Total Phosphorus (mg/L)	8:45	0.13	9:30	0.17				
Total Nitrogen (mg/L)	8:45	0.73	9:30	1.00				

Note: Sample 1 was collected during dry weather conditions. Samples 2-6 were collected during wet weather conditions.