

Rocky Branch Monitoring Sites

Monitoring Data Summary for February 18th, 2021 – March 23rd, 2021

Data Gaps

- At the ROCA station, the turbidity sensor was buried from March 18th to March 21st. This period of turbidity data was removed from the dataset.
- At the ROCB station, the turbidity sensor was buried from March 22nd to March 23rd, so that period of data was removed from the dataset.

SCDHEC Standards

- The ROCA and ROCB stations did not record any pH values outside of the acceptable SCDHEC range of 6 to 8.5
- The ROCA and ROCB stations recorded average DO concentrations of 9.3 mg/L and 9.8 mg/L, respectively, which are well above the SCDHEC daily average minimum standard of 5 mg/L.
- The minimum DO concentration recorded was 8.0 mg/L at ROCA station and 8.0 mg/L at the ROCB station. Both stations were above the SCDHEC discrete minimum standard of 4 mg/L.

Storm Events

- The ROCA station recorded 4 storm events during this monitoring period, resulting in 3.6 inches of total precipitation. The ROCB station recorded 5 storm events during this monitoring period, resulting in 3.7 inches of total precipitation.
- Both ROCA and ROCB stations exhibited typical responses to storm events during this monitoring period.

Potential Illicit Discharges and Abnormal Events

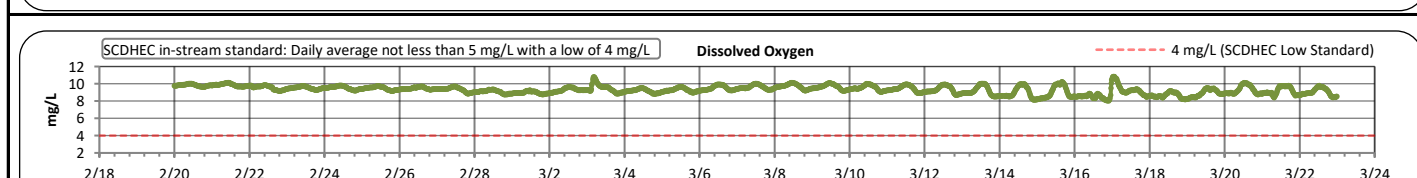
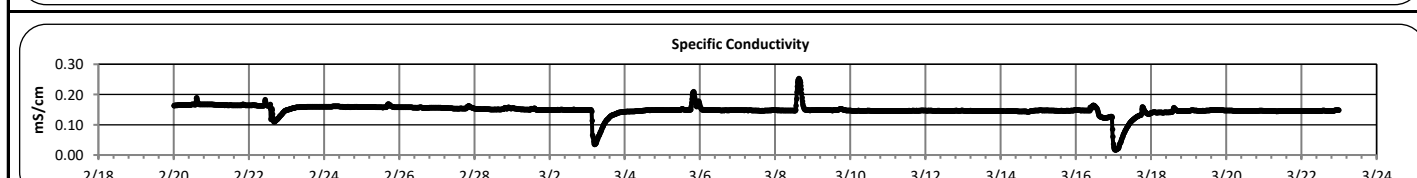
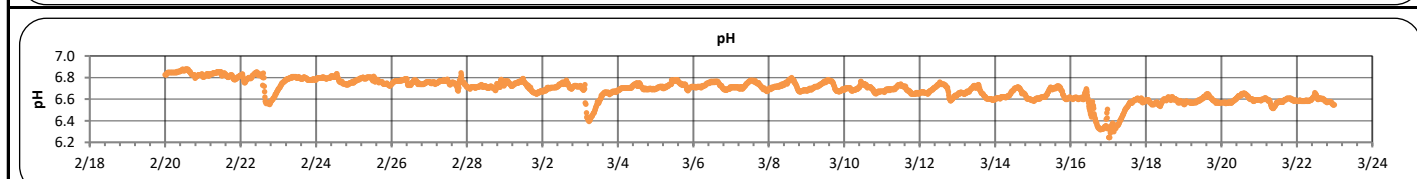
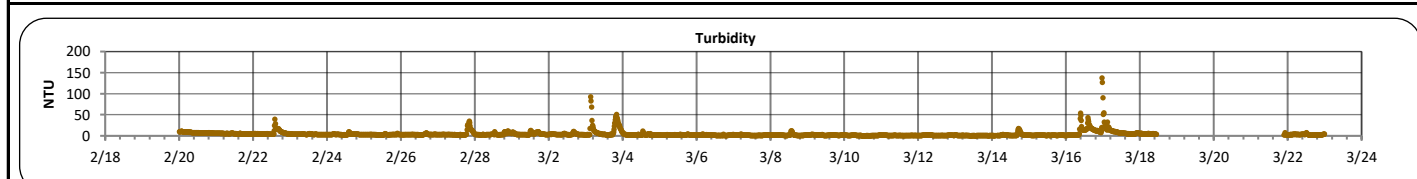
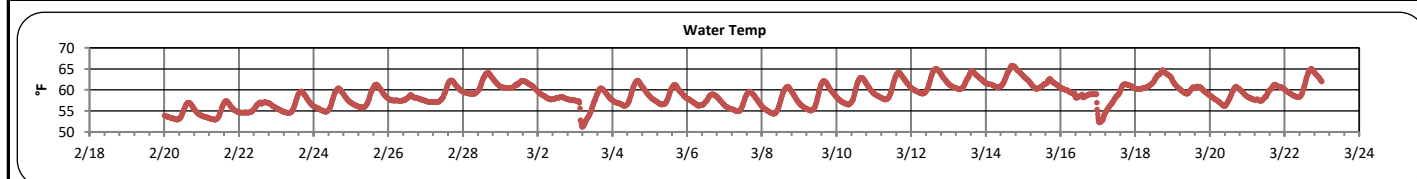
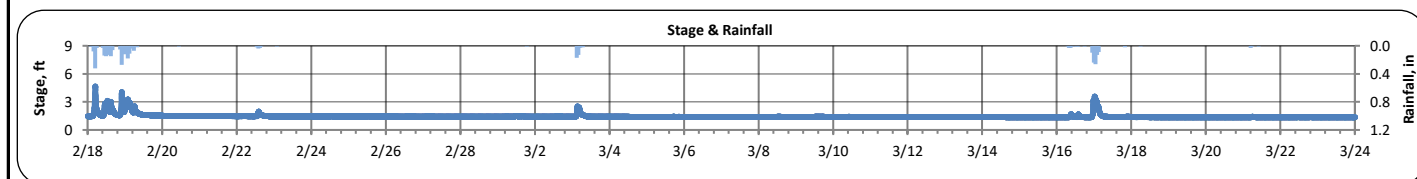
- At the ROCA station, elevated specific conductivity levels were observed on March 5th and March 8th. These elevated levels of specific conductivity were likely a result of the Maxcy Gregg pool discharge.
- At the ROCB station, specific conductivity levels were elevated on February 20th, February 21st, February 24th, February 25th, February 26th, March 2nd, March 5th, March 7th, March 8th-9th, March 15th-16th, and March 18th.

Flow Measurements

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

Rocky Branch A (February 18, 2021 - March 23, 2021)

PARAMETER	DESCRIPTION	CONTINUOUS WATER QUALITY PARAMETERS:	SUMMARY STATISTICS				
			MINIMUM OBSERVED	MAXIMUM OBSERVED	MEDIAN OBSERVED	MEAN OBSERVED	STANDARD DEVIATION
STREAM NAME:	Rocky Branch	STAGE (FT):	1.4	4.7	1.4	1.5	0.2
LOCATION:	Maxcy Gregg Park	TEMPERATURE (°F):	51	66	59	59	3
ADDRESS:	1650 Park Circle Columbia, SC 29201	TURBIDITY (NTU):	1	138	3	4	7
COORDINATES:	33.995864, -81.021842	pH:	6.2	6.9	6.7	6.7	0.1
TMDL/IMPAIRMENT:	Fecal Coliform	SPECIFIC CONDUCTIVITY (mS/cm):	0.017	0.253	0.148	0.148	0.018
NEIGHBORING LANDUSE:	Residential and commercial	DISSOLVED OXYGEN (mg/L):	8.0	10.9	9.4	9.3	0.5
SPATIAL LOCATION:	Most upstream site						
TOTAL NO. STORMS OVER 0.1 INCH:	4						
MAX. DAILY RAINFALL:	1.6 inches						
TOTAL RAINFALL (FOR PERIOD):	3.6 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 (February 18, 2021 - March 23, 2021)

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.

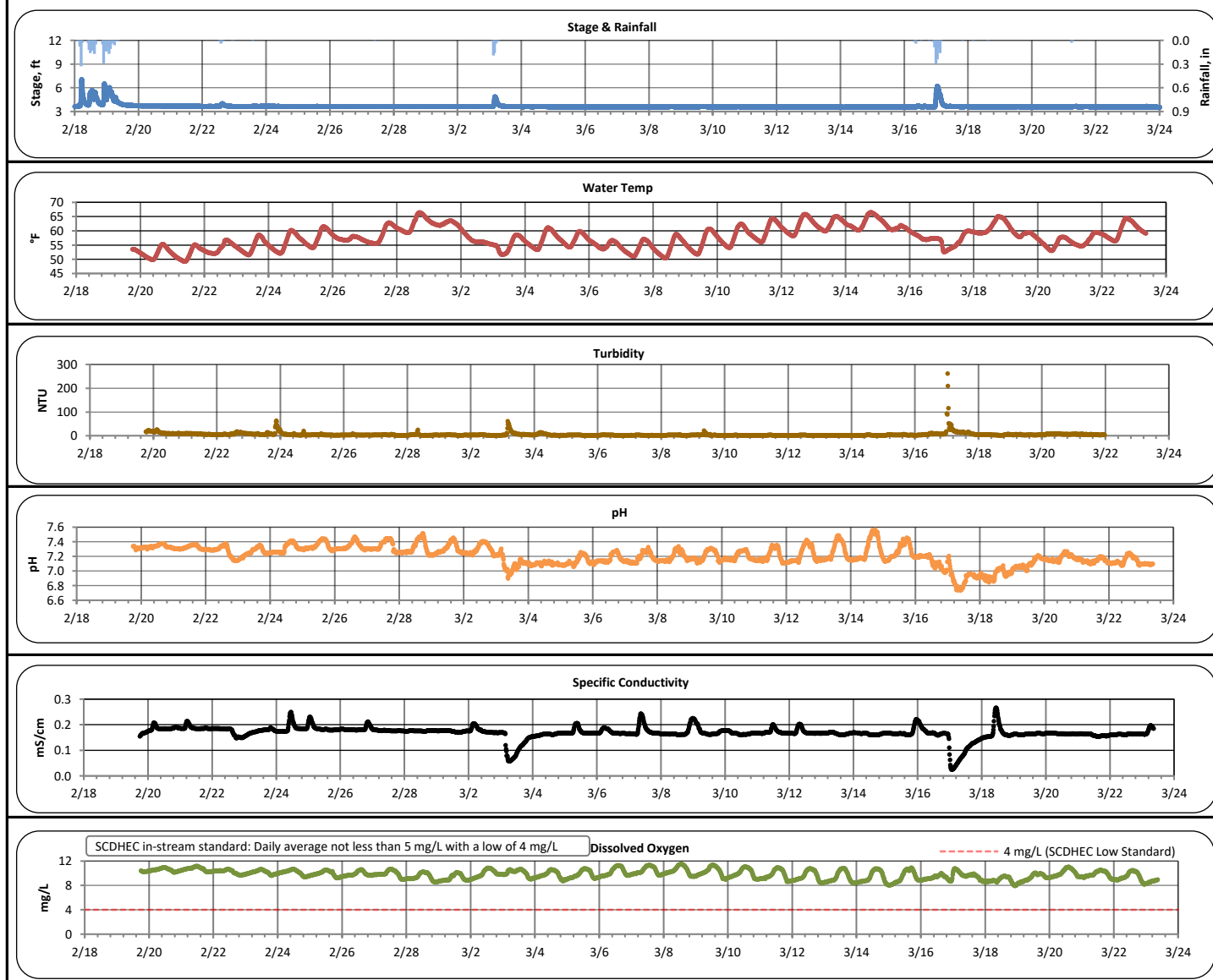
Grab Sample Data:

Analyte (units)	Sample 1		Sample 2		Sample 3		Sample 4	
	2/25/2021		3/10/2021		3/16/2021			
	Time	Results	Time	Results	Time	Results	Time	Results
<i>Escherichia coli</i> (MPN/100mL)	11:23	0	13:34	ND	9:16	11,588		
Total Suspended Solids (mg/L)								
Total Phosphorus (mg/L)								
Total Nitrogen (mg/L)								

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

Rocky Branch B (February 18, 2021 - March 23, 2021)

PARAMETER	DESCRIPTION	CONTINUOUS WATER QUALITY PARAMETERS:	SUMMARY STATISTICS				
			MINIMUM OBSERVED	MAXIMUM OBSERVED	MEDIAN OBSERVED	MEAN OBSERVED	STANDARD DEVIATION
STREAM NAME:	Rocky Branch	STAGE (FT):	3.6	7.1	3.6	3.7	0.3
LOCATION:	Olympia Ave Crossing	TEMPERATURE (°F):	49	67	57	58	4
ADDRESS:	510 Heyward St Columbia, SC 29201	TURBIDITY (NTU):	1	263	4	6	9
COORDINATES:	33.982578, -81.035036	pH:	6.7	7.6	7.2	7.2	0.1
TMDL/IMPAIRED:	Fecal Coliform	SPECIFIC CONDUCTIVITY (mS/cm):	0.025	0.266	0.168	0.169	0.025
NEIGHBORING LANDUSE:	Residential and commercial	DISSOLVED OXYGEN (mg/L):	8.0	11.5	9.9	9.8	0.7
SPATIAL LOCATION:	Most Downstream Site						
TOTAL NO. STORMS OVER 0.1 INCH:	5						
MAX. DAILY RAINFALL:	1.6 inches						
TOTAL RAINFALL (FOR PERIOD):	3.7 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 (February 18, 2021 - March 23, 2021)

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	
	2/25/2021		3/10/2021		3/16/2021			
	Time	Results	Time	Results	Time	Results	Time	Results
<i>Escherichia coli</i> (MPN/100mL)	11:34	150	13:17	40	9:27	418		
Total Suspended Solids (mg/L)								
Total Phosphorus (mg/L)								
Total Nitrogen (mg/L)								

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