Rocky Branch Monitoring Sites

Monitoring Data Summary for July 20th, 2020 – August 26th, 2020

Data Gaps

- At the ROCA station, a period of turbidity and DO data from July 20th-28th was removed from the dataset due to the sensor being buried, causing the turbidity values to be obscured.
- At the ROCB station, there were no data gaps.

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 6.7 mg/L and 6.2 mg/L, respectively, which are well above the SCDHEC daily average minimum standard of 5 mg/L.
- The minimum DO concentration recorded was 4.3 mg/L at ROCA station and 2.9 mg/L at the ROCB station. The ROCA station was above the SCDHEC discrete minimum standard of 4 mg/L while the ROCB station was below this value.

Storm Events

- The ROCA station recorded 12 storm events during this monitoring period, resulting in 7.2 inches of total precipitation. The ROCB station recorded 13 storm events during this monitoring period, resulting in 7.3 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, several increased levels of specific conductivity were recorded simultaneously with increased levels of pH. These occurrences were observed on July 23rd, August 4th, August 10th, and August 20th. The elevated levels of specific conductivity and pH were likely a result of the Maxcy Gregg pool discharge.
- At the ROCB station, specific conductivity levels were significantly elevated on July 22nd-24th, August 1st, August 6th and August 15th.

Flow Measurements

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

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Continuous Water Quality Monitoring Periodic Report

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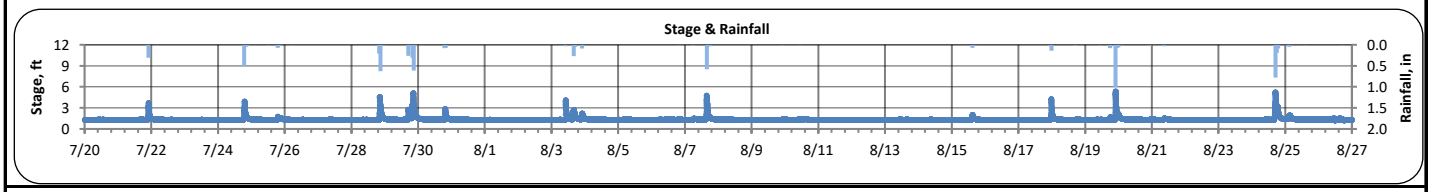
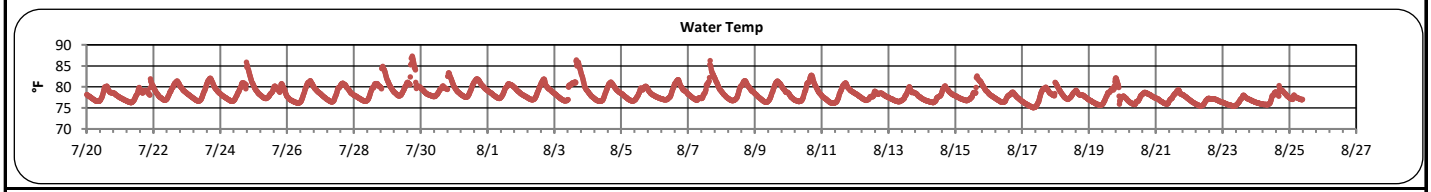
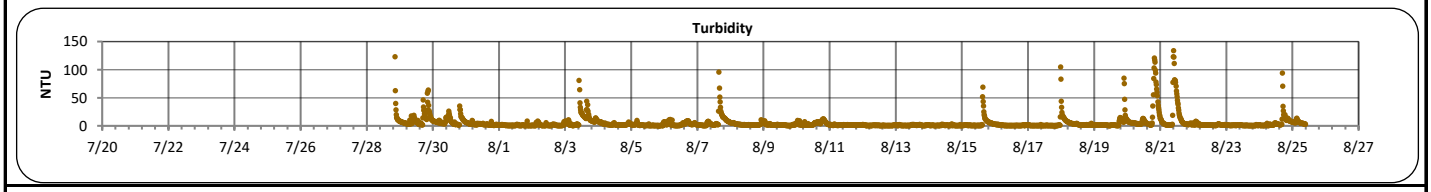
Rocky Branch A (July 20, 2020 - August 26, 2020)

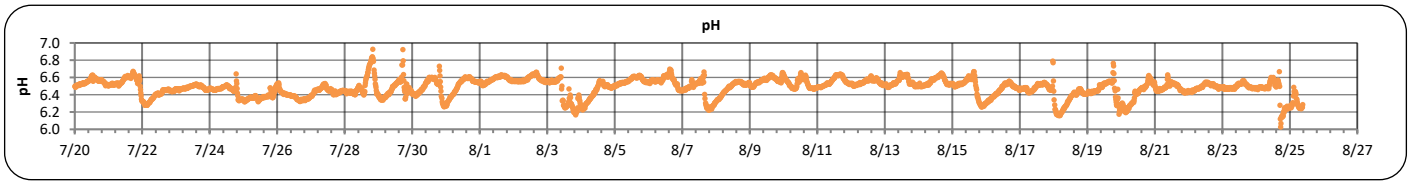
PARAMETER	DESCRIPTION
STREAM NAME:	Rocky Branch
LOCATION:	Maxcy Gregg Park
ADDRESS:	1650 Park Circle Columbia, SC 29201
COORDINATES:	33.995864, -81.021842
TMDL/IMPAIRMENT:	Fecal Coliform
NEIGHBORING LANDUSE:	Residential and commercial
SPATIAL LOCATION:	Most upstream site
TOTAL NO. STORMS OVER 0.1 INCH:	12
MAX. DAILY RAINFALL:	1.2 inches
TOTAL RAINFALL (FOR PERIOD):	7.2 inches

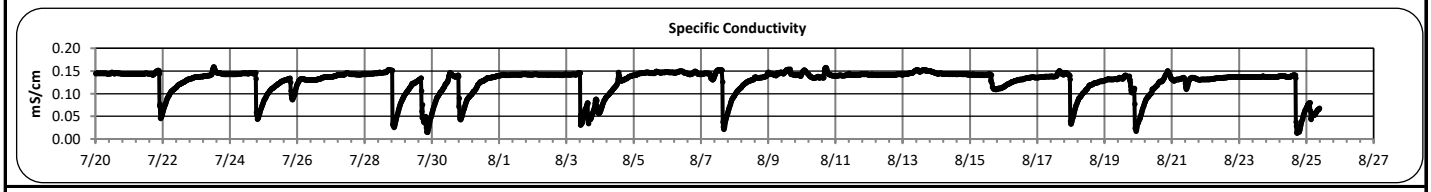
CONTINUOUS WATER QUALITY PARAMETERS:	SUMMARY STATISTICS				
	MINIMUM OBSERVED	MAXIMUM OBSERVED	MEDIAN OBSERVED	MEAN OBSERVED	STANDARD DEVIATION
STAGE (FT):	1.3	5.4	1.3	1.4	0.3
TEMPERATURE (°F):	75	87	78	78	2
TURBIDITY (NTU):	1	134	2	5	12
pH:	6.0	6.9	6.5	6.5	0.1
SPECIFIC CONDUCTIVITY (mS/cm):	0.013	0.159	0.138	0.128	0.027
DISSOLVED OXYGEN (mg/L):	4.3	8.0	6.7	6.7	0.6

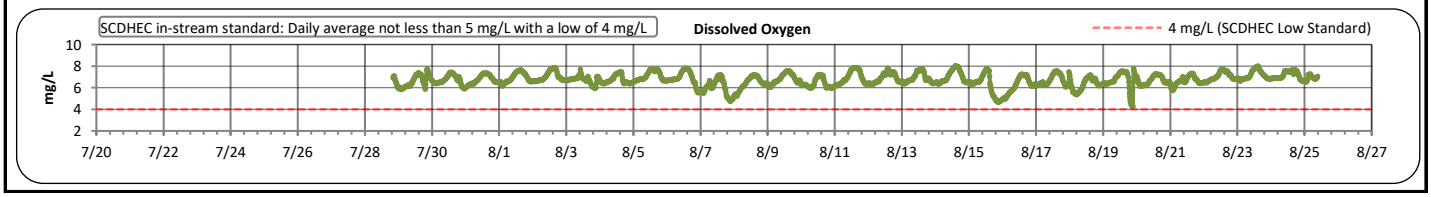












Note: Data gaps appear when the sonde is removed for calibration or when the flow depth is below the sensors

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Continuous Water Quality
Monitoring Periodic Report

Rocky Branch A (July 20, 2020 - August 26, 2020)

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	
	8/24/2020							
	Time	Result	Time	Result	Time	Result	Time	Result
Escherichia coli (MPN/100mL)	16:05	39,370						
Total Suspended Solids (mg/L)	16:05	29.8						
Total Phosphorus (mg/L)	16:05	0.22						
Total Nitrogen (mg/L)	16:05	2.45						

Notes: Sample 1 was collected during wet weather conditions.

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Continuous Water Quality Monitoring Periodic Report

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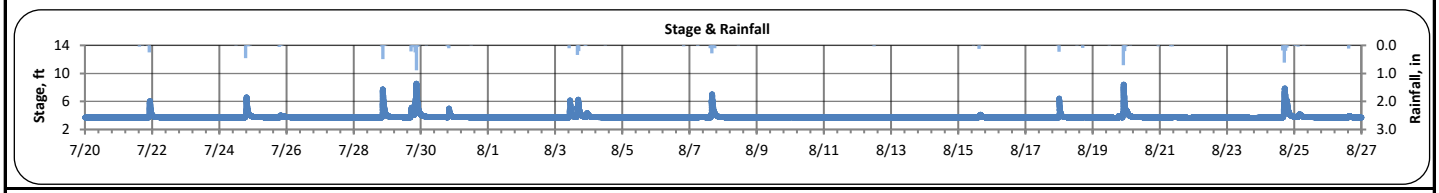
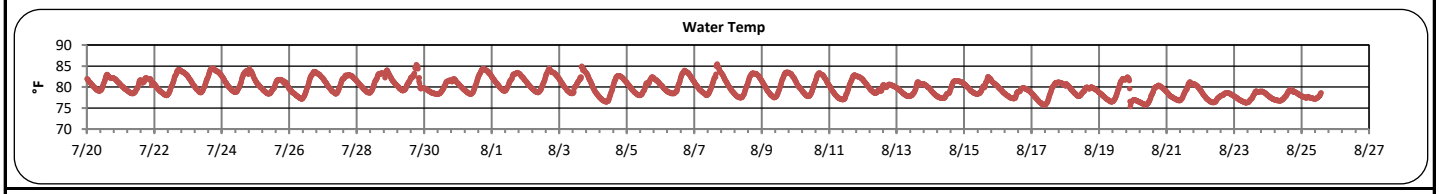
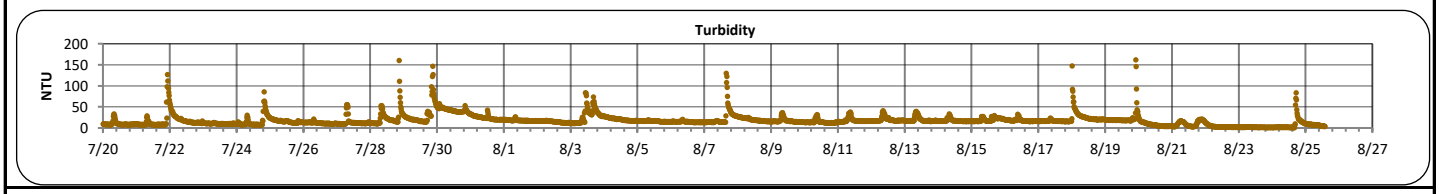
Rocky Branch B (July 20, 2020 - August 26, 2020)

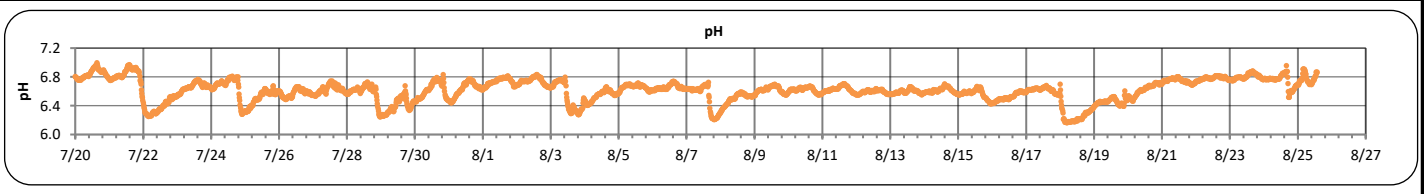
PARAMETER	DESCRIPTION
STREAM NAME:	Rocky Branch
LOCATION:	Olympia Ave Crossing
ADDRESS:	510 Heyward St Columbia, SC 29201
COORDINATES:	33.982578, -81.035036
TMDL/IMPAIRMENT:	Fecal Coliform
NEIGHBORING LANDUSE:	Residential and commercial
SPATIAL LOCATION:	Most Downstream Site
TOTAL NO. STORMS OVER 0.1 INCH:	13
MAX. DAILY RAINFALL:	1.5 inches
TOTAL RAINFALL (FOR PERIOD):	7.3 inches

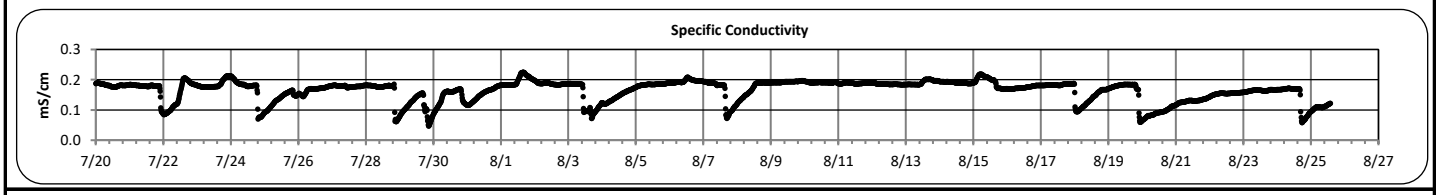
CONTINUOUS WATER QUALITY PARAMETERS:	SUMMARY STATISTICS				
	MINIMUM OBSERVED	MAXIMUM OBSERVED	MEDIAN OBSERVED	MEAN OBSERVED	STANDARD DEVIATION
STAGE (FT):	3.7	8.6	3.7	3.8	0.3
TEMPERATURE (°F):	75	86	80	80	2
TURBIDITY (NTU):	1	162	16	18	13
pH:	6.2	7.0	6.6	6.6	0.1
SPECIFIC CONDUCTIVITY (mS/cm):	0.047	0.225	0.179	0.165	0.034
DISSOLVED OXYGEN (mg/L):	2.9	8.4	6.3	6.2	0.8

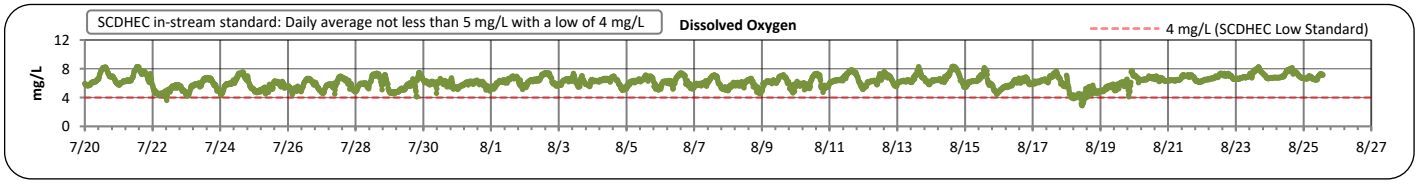












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Continuous Water Quality
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Rocky Branch B (July 20, 2020 - August 26, 2020)

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Sampled Data:

Analyte (units)	Sample 1		Sample 2		Sample 3		Sample 4	
	8/24/2020							
	Time	Result	Time	Result	Time	Result	Time	Result
Escherichia coli (MPN/100mL)	16:20	7,746						
Total Suspended Solids (mg/L)	16:20	26.4						
Total Phosphorus (mg/L)	16:20	0.17						
Total Nitrogen (mg/L)	16:20	1.96						

Note: Sample 1 was collected during wet weather conditions.

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