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.





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

		CONTINUOUS	SUMMARY STATISTICS				
PARAMETER	DESCRIPTION	WATER QUALITY PARAMETERS:	MINIMUM OBSERVED	MAXIMUM OBSERVED	MEDIAN OBSERVED	MEAN OBSERVED	STANDARD DEVIATION
STREAM NAME:	Rocky Branch	STAGE (FT):	1.3	5.4	1.3	1.4	0.3
LOCATION:	Maxcy Gregg Park						
ADDRESS:	1650 Park Circle Columbia, SC 29201	TEMPERATURE (°F):	75	87	78	78	2
COORDINATES:	33.995864, -81.021842	TURBIDITY (NTU):	1	134	2	5	12
TMDL/IMPAIRMENT:	Fecal Coliform	TOKBIBITT (NTO).	•	104		Ŭ	12
NEIGHBORING LANDUSE:	Residential and commercial	pH:	6.0	6.9	6.5	6.5	0.1
SPATIAL LOCATION:	Most upstream site	ODEOUE!O					
TOTAL NO. STORMS OVER 0.1 INCH:	12	SPECIFIC CONDUCTIVITY (mS/cm):	0.013	0.159	0.138	0.128	0.027
MAX. DAILY RAINFALL:	1.2 inches	DISSOLVED					
TOTAL RAINFALL (FOR PERIOD):	7.2 inches	OXYGEN (mg/L):	4.3	8.0	6.7	6.7	0.6
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6.8 6.4 6.2 6.0 7/20 7/22 7/24 SCDHEC in-stream stand	7/26 7/28 7/30 8/1	8/3 8/5 8/7 Specific Cond 8/3 8/5 8/7 Dissolver	8/9 8/11 : ductivity 8/9 8/11 d Oxygen	8/13 8/15	8/17 8/19 8/17 8/19	8/21 8/23 8/21 8/23 - 4 mg/L (SCDHEC Lo	8/25 8/27

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:

Analyto	Sample 1		Sample 2		Sample 3		Sample 4	
Analyte (units)	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.





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

		CONTINUOUS	SUMMARY STATISTICS					
PARAMETER	DESCRIPTION	WATER QUALITY PARAMETERS:	MINIMUM OBSERVED	MAXIMUM OBSERVED	MEDIAN OBSERVED	MEAN OBSERVED	STANDARD DEVIATION	
STREAM NAME:	Rocky Branch	STAGE (FT):	3.7	8.6	3.7	3.8	0.3	
LOCATION:	Olympia Ave Crossing							
ADDRESS:	510 Heyward St Columbia, SC 29201	TEMPERATURE (°F):	75	86	80	80	2	
COORDINATES:	33.982578, -81.035036	TURRIDITY (NTU)	1	100	40	40	40	
TMDL/IMPAIRMENT:	Fecal Coliform	orm TURBIDITY (NTU):		162	16	18	13	
NEIGHBORING LANDUSE:	Residential and commercial	pH:	6.2	7.0	6.6	6.6	0.1	
SPATIAL LOCATION:	Most Downstream Site	prii.	0.2	7.0	0.0	0.0	0.1	
TOTAL NO. STORMS OVER 0.1 INCH:	13	SPECIFIC CONDUCTIVITY (mS/cm):	0.047	0.225	0.179	0.165	0.034	
MAX. DAILY RAINFALL:	1.5 inches	DISSOLVED OXYGEN						
TOTAL RAINFALL (FOR PERIOD):	7.3 inches	(mg/L):	2.9	8.4	6.3	6.2	0.8	
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SCDHEC in-stream star	ndard: Daily average not less than 5 mg/L v	vith a low of 4 mg/L Dissolved	Oxygen			- 4 mg/l (CCC):55:	our Store de a "	
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.,25 ,,22 ,,24	.,20 ,,20 ,/30 0/1	5,5 0,5 0,1	-, 5 6,11	-, 10 0/10	-, 2, 0, 19	-, 0/23		

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

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

Explanation of Statistics:

MINIMUM OBSERVED	The minimum of the values recorded by the datasonde in 15 minute intervals.
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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	
	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.