Rocky Branch Monitoring Sites

Monitoring Data Summary for April 30th, 2020 – June 3rd, 2020

Data Gaps

- At the ROCA station, brief periods of turbidity data from May 25th-27th and from May 30th-June 2nd were removed from the dataset due to the sensor being buried, causing the turbidity values to become obscured.
- At the ROCA station, a brief period of DO data was removed from May 30th-June 2nd from the dataset due to the sensor being buried.
- At the ROCA and ROCB stations, the stage data from the CS451 pressure transducers was not recorded from May 15th-May 17th.

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 6.8 mg/L and 8.2 mg/L, respectively, which are well above the SCDHEC daily average minimum standard of 5 mg/L.
- The minimum DO concentration recorded was 2.8 mg/L at ROCA station and 5.6 mg/L at the ROCB station. The ROCA station was below the SCDHEC discrete minimum standard of 4 mg/L while the ROCB station was above this value.

Storm Events

- The ROCA station recorded 13 storm events during this monitoring period, resulting in 9.8 inches of total precipitation. The ROCB station also recorded 11 storm events during this monitoring period, resulting in 8.9 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 May 1st, 5th, 6th, 11th, 14th, 15th, 21st, 23rd, 28th, and 30th. These 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 May 3rd, 5th, 9th, 12th, 15th-16th, 20th, 21st-22nd and 28th-29th.

Flow Measurements

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





Rocky Branch A (April 30, 2020 - June 3, 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	7.8	1.3	1.4	0.4	
LOCATION:	Maxcy Gregg Park							
ADDRESS:	1650 Park Circle Columbia, SC 29201	TEMPERATURE (°F):	63	78	70	70	3	
COORDINATES:	33.995864, -81.021842	TURBIDITY (NTU):	1	578	3	14	31	
TMDL/IMPAIRMENT:	Fecal Coliform	ronsish r (itro).	·	0/0	ŭ		01	
NEIGHBORING LANDUSE:	Residential and commercial	pH:	6.1	6.9	6.5	6.5	0.1	
SPATIAL LOCATION:	Most upstream site							
TOTAL NO. STORMS OVER 0.1 INCH:	13	SPECIFIC CONDUCTIVITY (mS/cm):	0.015	0.481	0.150	0.143	0.034	
MAX. DAILY RAINFALL:	3.8 inches	DISSOLVED						
TOTAL RAINFALL (FOR PERIOD):	9.8 inches	OXYGEN (mg/L):	2.8	8.7	6.8	6.8	0.8	
	-	Stage & Rain	fall	-	-	-	-	
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© 0.2 € 0.1		L/\		روسعرما	سرحمه	74/****	^	
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SCOULCE in stream -t	dard: Daily average not loss than 5 m= 1	ith a low of 4 mg/l	d Owace			A mali ISCOLIECT	ow Standard)	
10	dard: Daily average not less than 5 mg/L w	Dissolve	d Oxygen			- 4 mg/L (SCDHEC Lo	ow standard)	
7/8m 4			MA	MAN	4	N		
2	F/6 F/0 F/0 F	1/12 5/14 5/16 5	/19 5/20	F/22 F/24	F/26 F/26	F/20 C/2	6/2	
4/30 5/2 5/4	5/6 5/8 5/10 5	5/12 5/14 5/16 5/	/18 5/20	5/22 5/24	5/26 5/28	5/30 6/1	6/3	

Rocky Branch A (April 30, 2020 - June 3, 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	
	5/20/2020		5/20/2020					
(units)	Time	Result	Time	Result	Time	Result	Time	Result
Escherichia coli (MPN/100mL)	10:58	3,232	12:23	12,260				
Total Suspended Solids (mg/L)	10:58	1.3	12:23	10.8				
Total Phosphorus (mg/L)	10:58	0.066	12:23	0.097				
Total Nitrogen (mg/L)	10:58	2.05	12:23	1.79				

Notes: All samples were collected during wet weather conditions.





Rocky Branch B (April 30, 2020 - June 3, 2020)

PARAMETER		CONTINUOUS	SUMMARY STATISTICS					
ANAMETER	DESCRIPTION	WATER QUALITY PARAMETERS:	MINIMUM OBSERVED	MAXIMUM OBSERVED	MEDIAN OBSERVED	MEAN OBSERVED	STANDARD DEVIATION	
STREAM NAME:	Rocky Branch	STAGE (FT):	3.5	9.3	3.7	3.7	0.4	
LOCATION:	Olympia Ave Crossing							
ADDRESS:	510 Heyward St Columbia, SC 29201	TEMPERATURE (°F):	60	78	71	70	4	
COORDINATES:	33.982578, -81.035036	TURBIDITY (NTU):	1	220	5	10	17	
TMDL/IMPAIRMENT:	Fecal Coliform	TOKBIDITT (NTO).	1	220	3	10	17	
NEIGHBORING LANDUSE:	Residential and commercial	pH:	6.3	7.5	7.0	7.0	0.2	
SPATIAL LOCATION:	Most Downstream Site							
TOTAL NO. STORMS OVER 0.1 INCH:	11	SPECIFIC CONDUCTIVITY (mS/cm):	0.041	0.271	0.190	0.178	0.041	
MAX. DAILY RAINFALL:	3.5 inches	DISSOLVED OXYGEN						
TOTAL RAINFALL (FOR PERIOD):	8.9 inches	(mg/L):	5.6	11.2	8.0	8.2	1.1	
		Stage & Rainf	all				•	
18 # 14			-1	7			0.0	
9 10 6 6							2.0 3.0	
2 +						-/	4.0	
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200 150 100 50 4/30 5/2 5/4 7.7 7.4 7.1 6.8 6.5 6.5 6.2 4/30 5/2 5/4	5/6 5/8 5/10 5	pH //12 5/14 5/16 5/: Specific Constant 5/12 5/14 5/16 5/	18 5/20 5 ductivity	5/22 5/24	5/26 5/28	5/30 6/1	6/3	
200 150 100 50 4/30 5/2 5/4 7.7 7.1 7.1 6.8 6.5 6.2 4/30 5/2 5/4 SCDHEC in-stream stan	5/6 5/8 5/10 5 5/6 5/8 5/10	pH //12 5/14 5/16 5/: Specific Conc 5/12 5/14 5/16 5/	18 5/20 5 ductivity	5/22 5/24	5/26 5/28	5/30 6/1 5/30 6/1	6/3	
200 100 100 50 4/30 5/2 5/4 7.7 7.1 6.8 6.5 6.2 4/30 5/2 5/4 SCDHEC in-stream stan	5/6 5/8 5/10 5 5/6 5/8 5/10	pH //12 5/14 5/16 5/: Specific Conc 5/12 5/14 5/16 5/	18 5/20 5 ductivity	5/22 5/24	5/26 5/28	5/30 6/1 5/30 6/1	6/3	

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Explanation of Statistics:

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Sampled Data:

Analyte (units)	Sample 1		Sample 2		Sample 3		Sample 4	
	5/20/2020		5/20/2020					
	Time	Result	Time	Result	Time	Result	Time	Result
Escherichia coli (MPN/100mL)	11:17	1,626	12:41	2,900				
Total Suspended Solids (mg/L)	11:17	2.9	12:41	8.9				
Total Phosphorus (mg/L)	11:17	0.11	12:41	0.14				
Total Nitrogen (mg/L)	11:17	1.86	12:41	1.31				

Notes: All samples were collected during wet weather conditions.