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.



Continuous Water Quality Monitoring Periodic Report



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

		CONTINUOUS WATER QUALITY PARAMETERS:		SUMMARY STATISTICS										
PARAMETER	DESCRIPTION			MINIMUM OBSERVED		MAXIMUM OBSERVED		MEDIAN OBSERVED		MEAN OBSERVED		STANDARD DEVIATION		
STREAM NAME:	Rocky Branch		STA	GE (FT):		1.4		4.7		1.4		1.5		0.2
LOCATION:	Maxcy Gregg Park													
ADDRESS:	1650 Park Circle Columbia, SC 29201		TEMPERATURE (°F):		51		66		59		59		3	
COORDINATES:	33.995864, -81.02184	2	TUR	BIDITY (N	ти.	1		138		3		4		7
TMDL/IMPAIRMENT:	Fecal Coliform				'		130		3		7		,	
NEIGHBORING LANDUSE:	Residential and comme	cial	pH:		6.2		6.9		6.7		6.7		0.1	
SPATIAL LOCATION:	Most upstream site		P											
TOTAL NO. STORMS OVER 0.1 INCH:	4		SPECIFIC CONDUCTIVITY (mS/cm):		Υ	0.01	7	0.253	3	0.148		0.148	0	0.018
MAX. DAILY RAINFALL:	1.6 inches		DISS	SOLVED		8.0		10.9						
TOTAL RAINFALL (FOR PERIOD):	3.6 inches			GEN (mg/	L):					9.4		9.3		0.5
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SCDHEC in-stream stan	dard: Daily average not less than	mg/L wit	h a low of	4 mg/L	Dissolved	Oxygen		-				4 mg/L (SCDHEC	Low Stand	ard)
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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:

	Sample 1 2/25/2021		Sample 2 3/10/2021		Sample 3 3/16/2021		Sample 4	
Analyte (units)								
	Time	Results	Time	Results	Time	Results	Time	Results
Escherichia coli (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.



Continuous Water Quality Monitoring Periodic Report



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

		CONTINUOUS	SUMMARY STATISTICS						
PARAMETER	DESCRIPTION	WATER QUALITY PARAMETERS:	MINIMUM OBSERVED	MAXIMUM OBSERVED	MEDIAN OBSERVED	MEAN OBSERVED	STANDARD DEVIATION		
STREAM NAME:	Rocky Branch	STAGE (FT):	3.6	7.1	3.6	3.7	0.3		
LOCATION:	Olympia Ave Crossing								
ADDRESS:	510 Heyward St Columbia, SC 29201	TEMPERATURE (°F):	49	67	57	58	4		
COORDINATES:	33.982578, -81.035036	TURBIDITY (NTU):	1	263	4	6	9		
TMDL/IMPAIRMENT:	Fecal Coliform	TOROLOTT (ITTO).		200	<u> </u>		Ů		
NEIGHBORING LANDUSE:	Residential and commercial	pH:	6.7	7.6	7.2	7.2	0.1		
SPATIAL LOCATION:	Most Downstream Site	SPECIFIC							
TOTAL NO. STORMS OVER 0.1 INCH:	5	CONDUCTIVITY (mS/cm):	0.025	0.266	0.168	0.169	0.025		
MAX. DAILY RAINFALL:	1.6 inches	DISSOLVED OXYGEN		44.5	0.0	0.0	0.7		
TOTAL RAINFALL (FOR PERIOD):	3.7 inches	(mg/L):	8.0	11.5	9.9	9.8	0.7		
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2/18 2/20 2/22 300 2/18 2/20 2/22 7.6 7.4 7.2 7.0 6.8 6.6 2/18 2/20 2/22	2/24 2/26 2/28	Turbidity Turbidity pH /2 3/4 3/6 3/ Specific Conduct Specific Conduct Turbidity	/8 3/10	3/12 3/14	3/16 3/18	3/20 3/	22 3/24		
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 $\label{thm:cond} \textbf{Note: Data gaps appear when the sonde is removed for calibration or when the flow depth is below the sensors}$

Continuous Water Quality Monitoring Periodic Report

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Explanation of Statistics:

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Sampled Data:

	Sample 1 2/25/2021		Sample 2 3/10/2021		Sample 3 3/16/2021		Sample 4	
Analyte (units)								
	Time	Results	Time	Results	Time	Results	Time	Results
Escherichia coli (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.