# Continuous Water Quality Monitoring Periodic Report

## Rocky Branch A (December 1, 2021 - January 4, 2022)

		CONTINUOUS	SUMMARY STATISTICS					
PARAMETER	DESCRIPTION WATER QUAL PARAMETERS		MINIMUM OBSERVED	MAXIMUM OBSERVED	MEDIAN OBSERVED	MEAN OBSERVED	STANDARD DEVIATION	
STREAM NAME:	Rocky Branch	STAGE (FT):	1.4	4.3	1.4	1.4	0.3	
LOCATION:	Maxcy Gregg Park							
ADDRESS:	1650 Park Circle Columbia, SC 29201	TEMPERATURE (°F):	50	68	61	61	3	
COORDINATES:	33.995864, -81.021842	TURBIDITY (NTU):	3	137	6	9	12	
TMDL/IMPAIRMENT:	Fecal Coliform							
NEIGHBORING LANDUSE:	Residential and commercial	pH:	6.3	6.9	6.7	6.6	0.1	
SPATIAL LOCATION:	Most upstream site							
TOTAL NO. STORMS OVER 0.1 INCH:	8	SPECIFIC CONDUCTIVITY (mS/cm):	0.009	0.175	0.133	0.124	0.025	
MAX. DAILY RAINFALL:	1.4 inches	DISSOLVED						
TOTAL RAINFALL (FOR PERIOD):	5.4 inches	OXYGEN (mg/L):	4.4	10.9	8.4	8.2	0.9	
		Stage & Rain	fall					
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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 (December 1, 2021 - January 4, 2022)

### **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	
	12/8/2021		12/8/2021		12/8/2021		12/8/2021	
	Time	Results	Time	Results	Time	Results	Time	Results
Escherichia coli (MPN/100mL)	8:10	5,818	9:25	5,206	10:21	9,222	11:28	6,510
Total Suspended Solids (mg/L)	8:10	34.9	9:25	19.5	10:21	13.2	11:28	11.4
Total Phosphorus (mg/L)	8:10	0.410	9:25	0.38	10:21	0.37	11:28	0.37
Total Nitrogen (mg/L)	8:10	1.34	9:25	1.13	10:21	1.56	11:28	1.58

All samples were collected during wet weather conditions.

#### **Notes:**

#### **Data Gaps**

- There was a short gap in data for all water quality parameters on December 9th, when the 6600 sonde was removed from service and replaced with an EXO2 sonde.
- Turbidity data was unavailable from the start of the monitoring period until December 9th, because the sensor was broken.
- Turbidity data was removed from December 30th to the end of the monitoring period because the sensor collected erroneus data due to fouling.

### Potential Illicit Discharges and Abnormal Events:

The specific conductivity increased on December 22nd and 27th, which may have been a result of the Maxcy Gregg pool discharge.

# Continuous Water Quality Monitoring Periodic Report

# Rocky Branch B (December 1, 2021 - January 4, 2022)

	CONTINUOUS		SUMMARY STATISTICS					
PARAMETER	DESCRIPTION	MINIMUM OBSERVED	MAXIMUM OBSERVED	MEDIAN OBSERVED	MEAN OBSERVED	STANDARD DEVIATION		
STREAM NAME:	Rocky Branch	Rocky Branch STAGE (FT):		6.8	3.3	3.4	0.4	
LOCATION:	Olympia Ave Crossing							
ADDRESS:	510 Heyward St Columbia, SC 29201	TEMPERATURE (°F):	49	68	57	58	4	
COORDINATES:	33.982578, -81.035036	TURBIDITY (NTU):	1.8	235.9	4.3	8.1	11.7	
TMDL/IMPAIRMENT:	Fecal Coliform	TOKBIDITT (NTO).	1.0	233.9	4.3	0.1	11.7	
NEIGHBORING LANDUSE:	Residential and commercial	pH:	6.7	7.5	7.2	7.2	0.1	
SPATIAL LOCATION:	Most Downstream Site						• • •	
TOTAL NO. STORMS OVER 0.1 INCH:	8	SPECIFIC CONDUCTIVITY (mS/cm):	0.026	0.203	0.154	0.143	0.034	
MAX. DAILY RAINFALL:	1.5 inches	DISSOLVED OXYGEN						
TOTAL RAINFALL (FOR PERIOD):	5.8 inches	(mg/L):	7.6	11.0	9.3	9.3	0.7	
		Stage & Rain	fall	•		•	•	
# 7 7 8 5 5 3 12/1 12/3 12/5	12/7 12/9 12/11	12/13 12/15 12/17 1	2/19 12/21	12/23 12/25	12/27 12/29	12/31 1/2	0.0 0.3 0.6 0.9	
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	12/8/2021		12/8/2021		12/8/2021		12/8/2021	
	Time	Results	Time	Results	Time	Results	Time	Results
Escherichia coli (MPN/100mL)	8:35	7,568	9:40	9,768	10:45	6,896	11:44	8,704
Total Suspended Solids (mg/L)	8:35	72.4	9:40	33	10:45	24.3	11:44	20.8
Total Phosphorus (mg/L)	8:35	0.48	9:40	0.40	10:45	0.36	11:44	0.35
Total Nitrogen (mg/L)	8:35	1.94	9:40	1.43	10:45	1.34	11:44	1.51

All samples were collected during wet weather conditions.

#### Notes:

### **Data Gaps**

- There was a short gap in data for all water quality parameters on December 9th, when the 6600 sonde was removed from service and replaced with an EXO2 sonde.
- Stage data is unavailable for a number of hours on December 7th, because of communication errors with the pressure transducer.

#### Potential Illicit Discharges and Abnormal Events:

The specific conductivity increased several times throughout the monitoring period, which may have been a result of the Maxcy Gregg pool discharge.