# Rocky Branch Monitoring Sites
## Monitoring Data Summary for
## June 19th, 2019 – July 25th, 2019

*Data Gaps*

- No interruptions were observed in the water quality data at ROCA during this monitoring period.
- At ROCB, a brief period of turbidity sensor fouling occurred from July 21st-23rd and was deleted from the dataset.
- The website experienced reporting issues with the CS451 pressure transducers at ROCA and ROCB on July 20th, therefore no CS451 stage data was recorded during that brief period.

*SCDHEC Standards*

- Both the ROCA and ROCB stations recorded pH values that were within the acceptable SCDHEC range of 6 to 8.5 during this monitoring period.
- The ROCA and ROCB stations recorded average DO concentrations of 7.3 mg/L and 7.4 mg/L, respectively, which are both above the SCDHEC daily average minimum standard of 5 mg/L.
- The instantaneous minimum DO values recorded at the ROCA and ROCB stations were 5.7 mg/L and 4.8 mg/L, respectively, which are both above the SCDHEC instantaneous minimum DO standard of 4 mg/L.

*Storm Events*

- The ROCA station recorded 8 storm events during this monitoring period, resulting in 4.4 inches of total precipitation. The ROCB station also recorded 9 storm events during this monitoring period, resulting in 4.6 inches of total precipitation.
- Both ROCA and ROCB stations exhibited typical responses to storm events during this monitoring period.
- The maximum antecedent dry time since the last significant precipitation event (at least 0.1 inches) was approximately 9.6 days in the Rocky Branch watershed occurring prior to the July 4th storm event.

*Potential Illicit Discharges and Abnormal Events*

- Several elevated specific conductivity levels occurred at both Rocky Branch monitoring stations. These occurrences were likely a result of pool maintenance at Maxcy Gregg.
    - At the ROCA station, these periods of elevated specific conductivity took place on: June 22nd, July 3rd, 4th, and 17th-18th.
    - At the ROCB station, these periods of elevated specific conductivity took place on: June 20th, 22nd-23rd, 24th-25th, 26th, 28th, July 3rd-4th, 16th, and 18th-19th.

*Flow Measurements*

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

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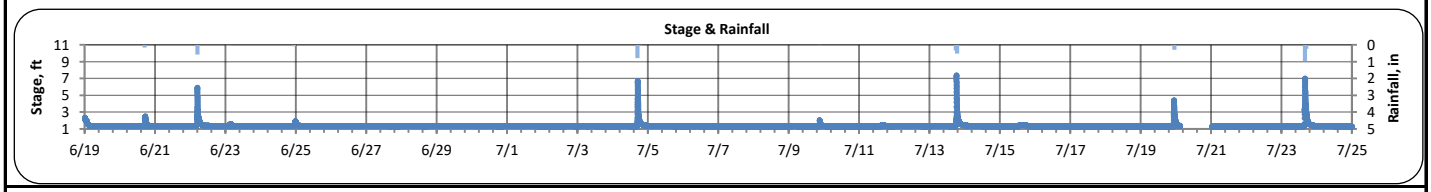
# Continuous Water Quality Monitoring Periodic Report

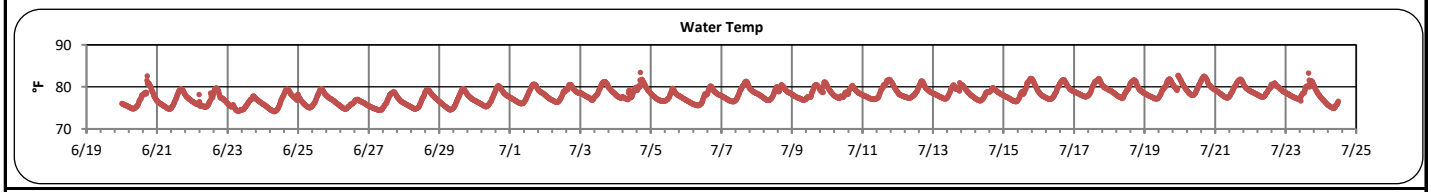
WOOLPERT

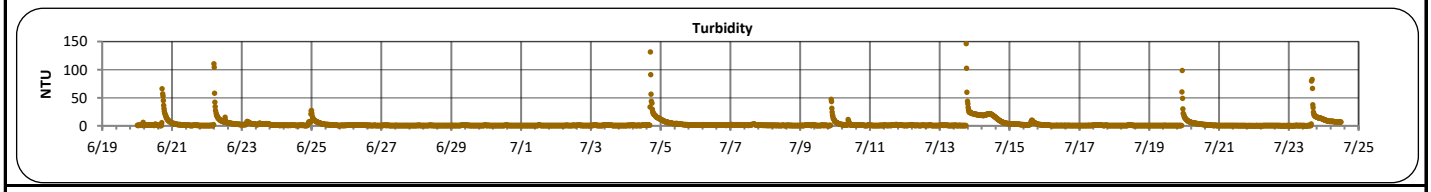
## Rocky Branch A (June 19, 2019 -- July 25, 2019)

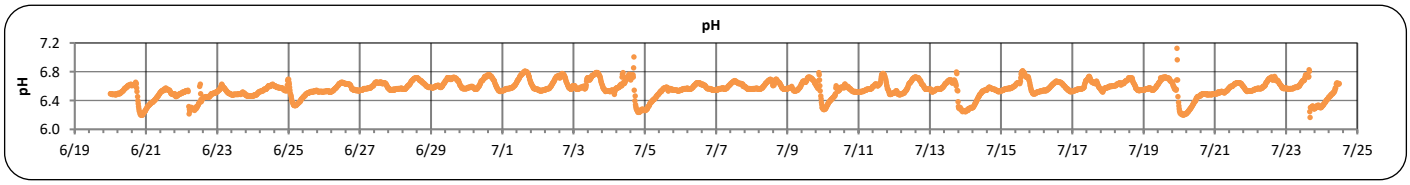
| PARAMETER | DESCRIPTION |
|---|---|
| STREAM NAME: | Rocky Branch |
| LOCATION: | Maxcy Gregg Park |
| ADDRESS: | 1650 Park Circle Columbia, SC 29201 |
| COORDINATES: | 33.995864, -81.021842 |
| TMDL/IMPAIRMENT: | Fecal Coliform |
| NEIGHBORING LANDUSE: | Residential and commercial |
| SPATIAL LOCATION: | Most upstream site |
| TOTAL NO. STORMS OVER 0.1 INCH: | 8 |
| MAX. DAILY RAINFALL: | 1.2 inches |
| TOTAL RAINFALL (FOR PERIOD): | 4.4 inches |

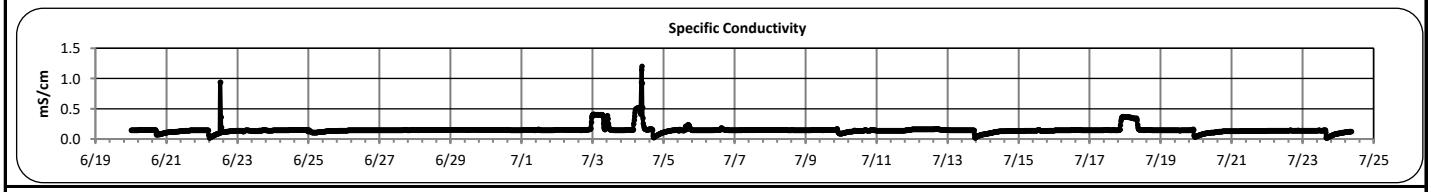
| CONTINUOUS WATER QUALITY PARAMETERS: | SUMMARY STATISTICS | | | | |
|---|---|---|---|---|---|
| | MINIMUM OBSERVED | MAXIMUM OBSERVED | MEDIAN OBSERVED | MEAN OBSERVED | STANDARD DEVIATION |
| STAGE (FT): | 1.3 | 7.4 | 1.3 | 1.4 | 0.3 |
| TEMPERATURE (°F): | 74 | 83 | 78 | 78 | 2 |
| TURBIDITY (NTU): | 1 | 147 | 1 | 3 | 8 |
| pH: | 6.2 | 7.1 | 6.6 | 6.6 | 0.1 |
| SPECIFIC CONDUCTIVITY (mS/cm): | 0.015 | 1.20 | 0.145 | 0.148 | 0.063 |
| DISSOLVED OXYGEN (mg/L): | 5.7 | 9.7 | 7.0 | 7.3 | 0.8 |

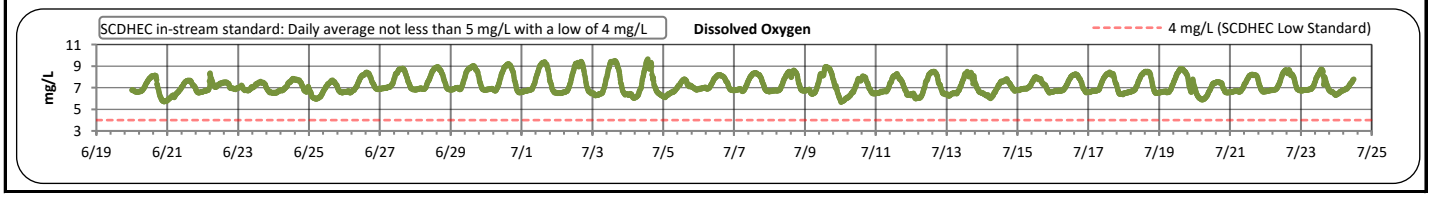



Note: Data gaps appear when the sonde is removed for calibration or when the flow depth is below the sensors

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**Continuous Water Quality**
**Monitoring Periodic Report**

**Rocky Branch A (June 19, 2019 -- July 25, 2019)**

## 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 | |
|---|---|---|---|---|---|---|---|---|
| | 7/17/2019 | | | | | | | |
| | Time | Result | Time | Result | Time | Result | Time | Result |
| *Escherichia coli (MPN/100mL)* | 10:30 | 500 | | | | | | |
| Total Suspended Solids (mg/L) | | | | | | | | |
| Total Phosphorus (mg/L) | | | | | | | | |
| Total Nitrogen (mg/L) | | | | | | | | |

Note: This sample was collected during dry weather conditions.

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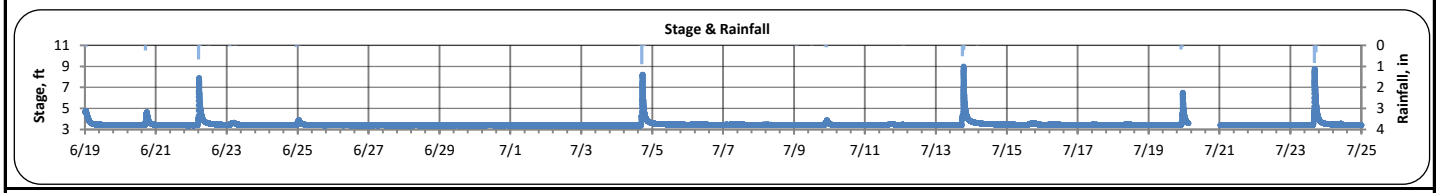
# Continuous Water Quality Monitoring Periodic Report

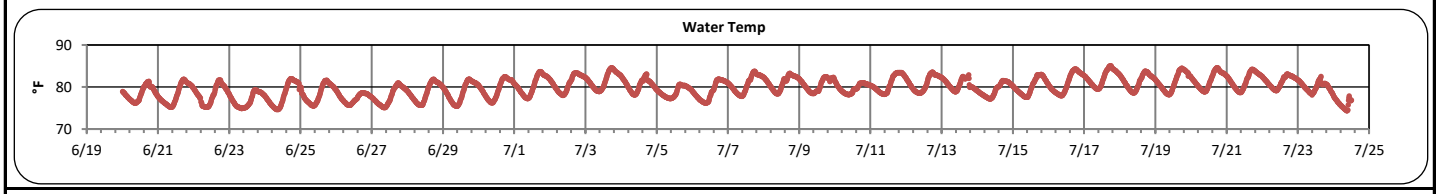
WOOLPERT

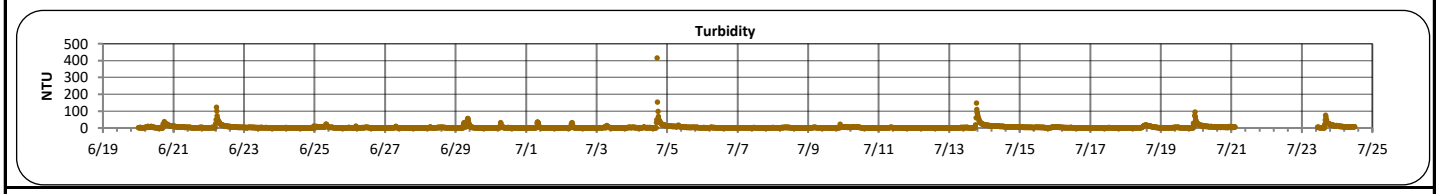
## Rocky Branch B (June 19, 2019 -- July 25, 2019)

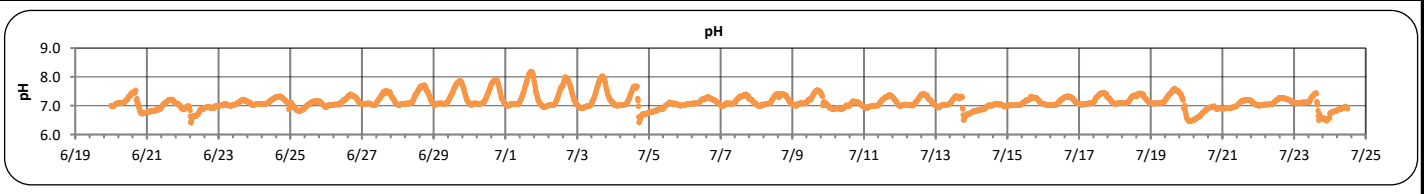
| PARAMETER | DESCRIPTION |
|---|---|
| STREAM NAME: | Rocky Branch |
| LOCATION: | Olympia Ave Crossing |
| ADDRESS: | 510 Heyward St Columbia, SC 29201 |
| COORDINATES: | 33.982578, -81.035036 |
| TMDL/IMPAIRMENT: | Fecal Coliform |
| NEIGHBORING LANDUSE: | Residential and commercial |
| SPATIAL LOCATION: | Most Downstream Site |
| TOTAL NO. STORMS OVER 0.1 INCH: | 9 |
| MAX. DAILY RAINFALL: | 1.2 inches |
| TOTAL RAINFALL (FOR PERIOD): | 4.6 inches |

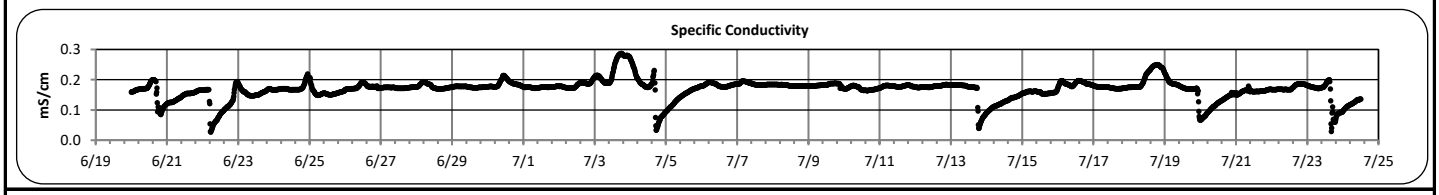
| CONTINUOUS WATER QUALITY PARAMETERS: | SUMMARY STATISTICS | | | | |
|---|---|---|---|---|---|
| | MINIMUM OBSERVED | MAXIMUM OBSERVED | MEDIAN OBSERVED | MEAN OBSERVED | STANDARD DEVIATION |
| STAGE (FT): | 3.4 | 9.0 | 3.4 | 3.5 | 0.4 |
| TEMPERATURE (°F): | 74 | 85 | 80 | 80 | 2 |
| TURBIDITY (NTU): | 1 | 417 | 3 | 6 | 12 |
| pH: | 6.4 | 8.2 | 7.1 | 7.1 | 0.2 |
| SPECIFIC CONDUCTIVITY (mS/cm): | 0.027 | 0.287 | 0.175 | 0.169 | 0.033 |
| DISSOLVED OXYGEN (mg/L): | 4.8 | 10.3 | 7.1 | 7.4 | 1.0 |

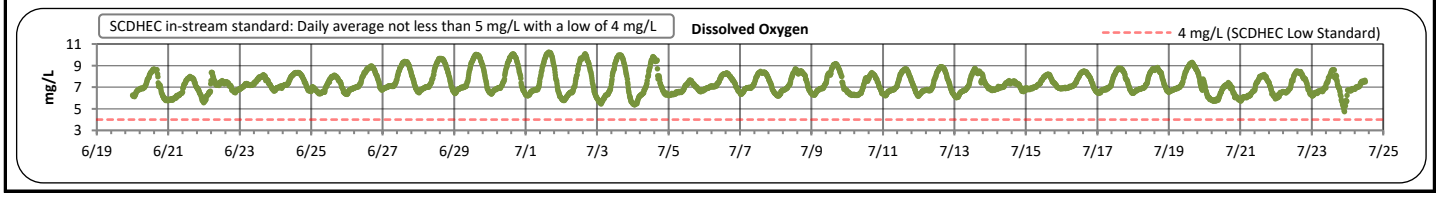
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**Continuous Water Quality**
**Monitoring Periodic Report**

**Rocky Branch B (June 19, 2019 -- July 25, 2019)**

## Explanation of Statistics:

| | |
|---|---|
| **MINIMUM OBSERVED** | The minimum of the values recorded by the datasonde in 15 minute intervals. |
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## Sampled Data:

| Analyte (units) | Sample 1 | | Sample 2 | | Sample 3 | | Sample 4 | |
|---|---|---|---|---|---|---|---|---|
| | 7/17/2019 | | | | | | | |
| | Time | Result | Time | Result | Time | Result | Time | Result |
| *Escherichia coli (MPN/100mL)* | 10:45 | 852 | | | | | | |
| Total Suspended Solids (mg/L) | | | | | | | | |
| Total Phosphorus (mg/L) | | | | | | | | |
| Total Nitrogen (mg/L) | | | | | | | | |

Note: This sample was collected during dry weather conditions.

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