

Rocky Branch Monitoring Sites

Monitoring Data Summary for January 6th, 2021 – February 17th, 2021

Data Gaps

- At the ROCA and ROCB stations, there were no data gaps during this monitoring period.

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 9.8 mg/L and 10.4 mg/L, respectively, which are well above the SCDHEC daily average minimum standard of 5 mg/L.
- The minimum DO concentration recorded was 8.7 mg/L at ROCA station and 8.6 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 10 storm events greater than 0.1 inches of precipitation during this monitoring period, resulting in 5.5 inches of total precipitation. The ROCB station recorded 12 storm events during this monitoring period, resulting in 5.4 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

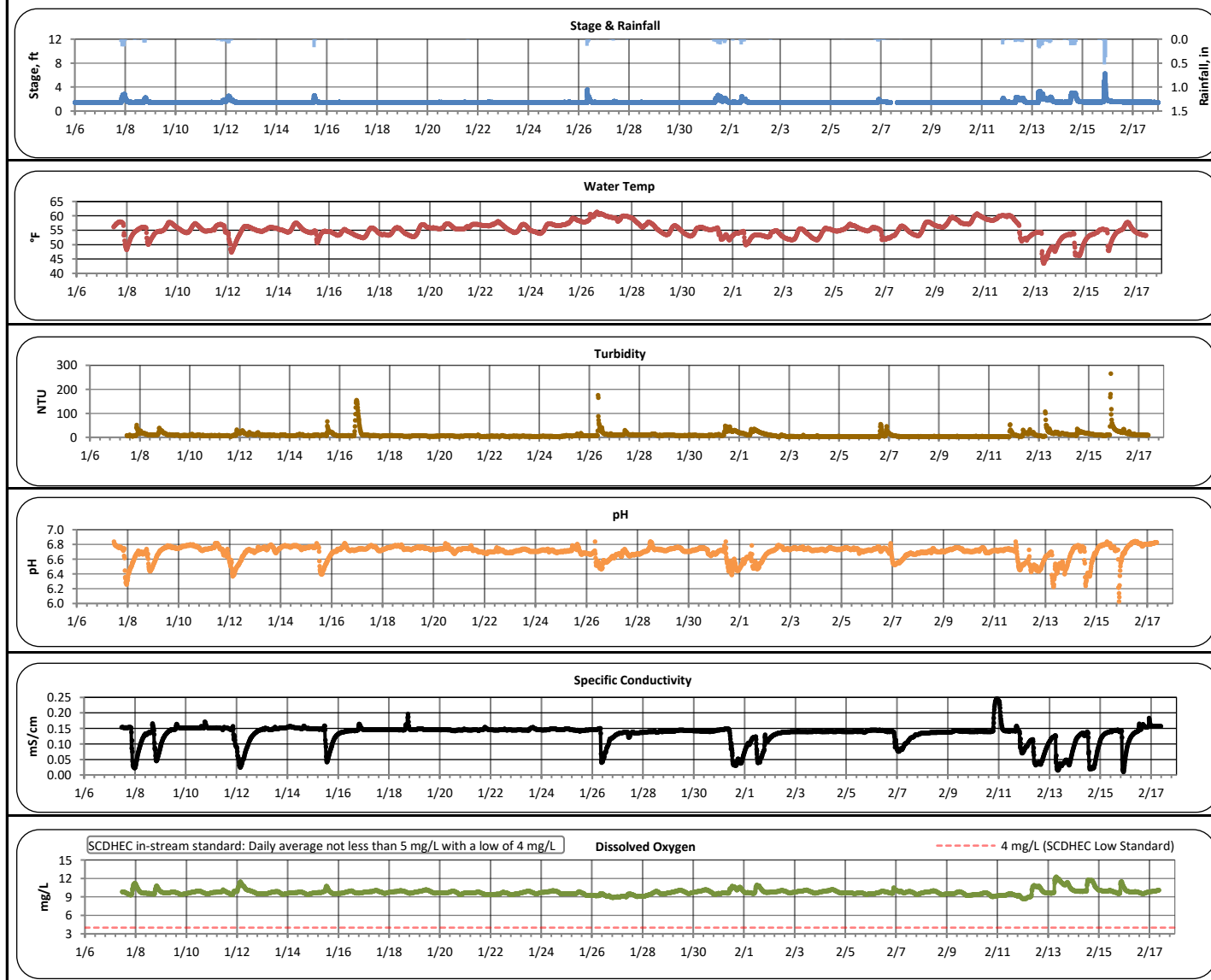
- At the ROCA station, increased levels of specific conductivity were observed on January 18th and February 10th-11th. These elevated levels of specific conductivity were likely a result of the Maxcy Gregg pool discharge.
- At the ROCB station, specific conductivity levels were elevated on January 10th-11th, January 14th, January 17th, January 19th, January 20th, January 23rd-24th, January 29th, February 4th, February 10th, February 11th, and February 16th.

Flow Measurements

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

Rocky Branch A (January 6, 2021 - February 17, 2021)

| PARAMETER | DESCRIPTION | CONTINUOUS WATER QUALITY PARAMETERS: | SUMMARY STATISTICS | | | | |
|---------------------------------|--|--------------------------------------|--------------------|------------------|-----------------|---------------|--------------------|
| | | | MINIMUM OBSERVED | MAXIMUM OBSERVED | MEDIAN OBSERVED | MEAN OBSERVED | STANDARD DEVIATION |
| STREAM NAME: | Rocky Branch | STAGE (FT): | 1.4 | 3.6 | 1.4 | 1.5 | 0.2 |
| LOCATION: | Maxcy Gregg Park | TEMPERATURE (°F): | 43 | 61 | 55 | 55 | 3 |
| ADDRESS: | 1650 Park Circle Columbia, SC 29201 | TURBIDITY (NTU): | 2 | 266 | 8 | 10 | 13 |
| COORDINATES: | 33.995864, -81.021842 | pH: | 6.0 | 6.9 | 6.7 | 6.7 | 0.1 |
| TMDL/IMPAIRMENT: | Fecal Coliform | SPECIFIC CONDUCTIVITY (mS/cm): | 0.010 | 0.246 | 0.141 | 0.132 | 0.032 |
| NEIGHBORING LANDUSE: | Residential and commercial | DISSOLVED OXYGEN (mg/L): | 8.7 | 12.3 | 9.7 | 9.8 | 0.4 |
| SPATIAL LOCATION: | Most upstream site | | | | | | |
| TOTAL NO. STORMS OVER 0.1 INCH: | 10 | | | | | | |
| MAX. DAILY RAINFALL: | 1.1 inches | | | | | | |
| TOTAL RAINFALL (FOR PERIOD): | 5.5 inches | | | | | | |



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 (January 6, 2021 - February 17, 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. |

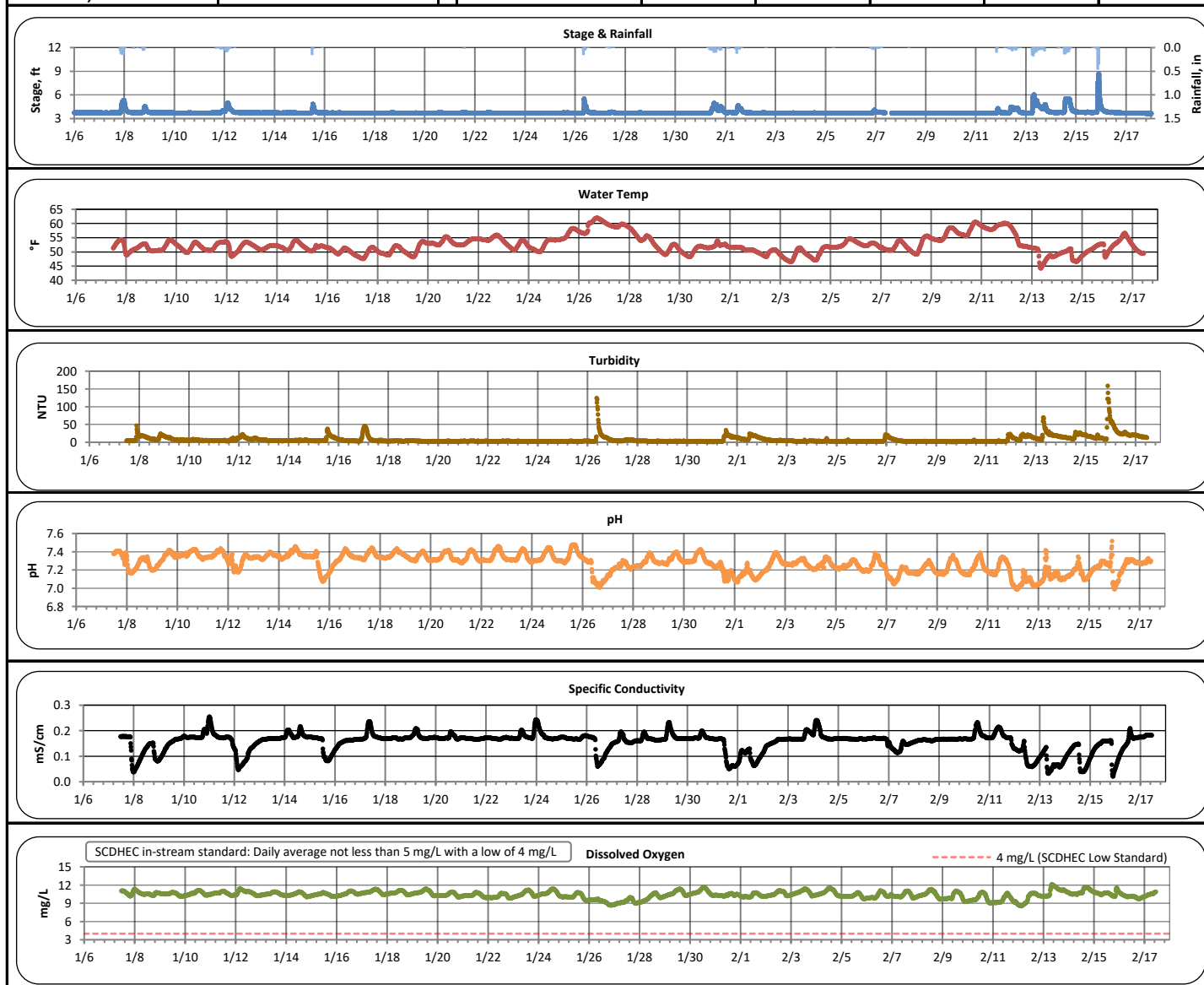
Grab Sample Data:

| Analyte (units) | Sample 1 | | Sample 2 | | Sample 3 | | Sample 4 | |
|-------------------------------------|-----------|---------|-----------|---------|-----------|---------|-----------|---------|
| | 1/25/2021 | | 2/12/2021 | | 2/12/2021 | | 2/12/2021 | |
| | Time | Results | Time | Results | Time | Results | Time | Results |
| <i>Escherichia coli</i> (MPN/100mL) | 12:55 | 20 | 8:30 | 1,714 | 9:38 | 8,212 | 11:15 | 28,272 |
| Total Suspended Solids (mg/L) | | | 8:30 | 37.3 | 9:38 | 26.4 | 11:15 | 14.4 |
| Total Phosphorus (mg/L) | | | 8:30 | 0.17 | 9:38 | 0.22 | 11:15 | 0.069 |
| Total Nitrogen (mg/L) | | | 8:30 | 1.44 | 9:38 | 0.76 | 11:15 | 0.97 |

Notes: Sample 1 was taken during dry weather conditions. Samples 2, 3, and 4 were taken during wet weather conditions.

Rocky Branch B (January 6, 2021 - February 17, 2021)

| PARAMETER | DESCRIPTION | CONTINUOUS WATER QUALITY PARAMETERS: | SUMMARY STATISTICS | | | | |
|---------------------------------|--------------------------------------|--------------------------------------|--------------------|------------------|-----------------|---------------|--------------------|
| | | | MINIMUM OBSERVED | MAXIMUM OBSERVED | MEDIAN OBSERVED | MEAN OBSERVED | STANDARD DEVIATION |
| STREAM NAME: | Rocky Branch | STAGE (FT): | 3.7 | 5.5 | 3.7 | 3.8 | 0.2 |
| LOCATION: | Olympia Ave Crossing | TEMPERATURE (°F): | 44 | 62 | 52 | 53 | 3 |
| ADDRESS: | 510 Heyward St Columbia, SC 29201 | TURBIDITY (NTU): | 2 | 159 | 4 | 8 | 10 |
| COORDINATES: | 33.982578, -81.035036 | pH: | 7.0 | 7.5 | 7.3 | 7.3 | 0.1 |
| TMDL/IMPAIRMENT: | Fecal Coliform | SPECIFIC CONDUCTIVITY (mS/cm): | 0.021 | 0.255 | 0.169 | 0.155 | 0.038 |
| NEIGHBORING LANDUSE: | Residential and commercial | DISSOLVED OXYGEN (mg/L): | 8.6 | 12.1 | 10.5 | 10.4 | 0.6 |
| SPATIAL LOCATION: | Most Downstream Site | | | | | | |
| TOTAL NO. STORMS OVER 0.1 INCH: | 12 | | | | | | |
| MAX. DAILY RAINFALL: | 1.0 inches | | | | | | |
| TOTAL RAINFALL (FOR PERIOD): | 5.4 inches | | | | | | |



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 B (January 6, 2021 - February 17, 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. |

Sampled Data:

| Analyte (units) | Sample 1 | | Sample 2 | | Sample 3 | | Sample 4 | |
|-------------------------------------|-----------|---------|-----------|---------|-----------|---------|-----------|---------|
| | 1/25/2021 | | 2/12/2021 | | 2/12/2021 | | 2/12/2021 | |
| | Time | Results | Time | Results | Time | Results | Time | Results |
| <i>Escherichia coli</i> (MPN/100mL) | 13:05 | 20 | 8:57 | 170 | 10:04 | 736 | 11:33 | 2,492 |
| Total Suspended Solids (mg/L) | | | 8:57 | 8.2 | 10:04 | 21.8 | 11:33 | 20 |
| Total Phosphorus (mg/L) | | | 8:57 | 0.12 | 10:04 | 0.15 | 11:33 | 0.095 |
| Total Nitrogen (mg/L) | | | 8:57 | 1.83 | 10:04 | 1.3 | 11:33 | 0.77 |

Notes: Sample 1 was taken during dry weather conditions. Samples 2, 3, and 4 were taken during wet weather conditions.