Rocky Branch Monitoring Sites

Data Gaps

- The Rocky Branch monitoring stations did not experience any submergence issues or periods of fouling during this monitoring period.

SCDHEC Standards

- The ROCA and ROCB stations recorded average DO concentrations of 7.0 and 6.9 mg/L, respectively. The average DO levels decreased during this monitoring period when compared to the previous monitoring period, likely as a result of increasing water temperatures. The instantaneous DO concentration at ROCA did not fall below the 4 mg/L SDHEC standard; however the ROCB station recorded a minimum DO level of 2.8 mg/L, following two storm events on June 22nd and June 23rd which caused elevated water temperatures.
- The pH standard was not violated at either of the Rocky Branch monitoring sites.

Storm Events

- The ROCA and ROCB rain gages recorded 8 and 5 separate storm events during this monitoring period, a reflection on the scattered nature of summer thunderstorms in the watershed. The Rocky Branch watershed experienced over two weeks of dry weather between June 5th and June 21st.
- Two large storm events impacted the watershed on the evening of June 2nd and in the early hours of June 4th.

Potential Illicit Discharges and Abnormal Events

- At ROCA, 8 potential illicit discharges were recorded:
    - 5 of these events were associated with the pool maintenance at Macxy Greg pool. These events were recorded on May 29th, and June 4th, 12th, 15th, and 26th, resulting most notably in extremely elevated specific conductivity levels.
    - On June 3rd, 5th, and 18th, smaller illicit discharges were noted which may also have been associated with pool maintenance activities other than pool filter backwash events.
- At ROCB, several increases in specific conductivity were noted. These occurred on May 30th, June 12th-13th, June 16th, and June 26th-27th. These appear to have been the downstream result of the Maxcy Greg pool maintenance events which were observed at ROCA.

City of Columbia, SC Stormwater Management
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Continuous Water Quality Monitoring Periodic Report

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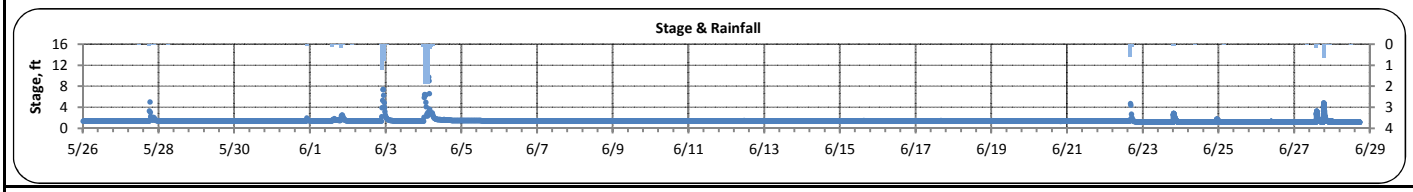
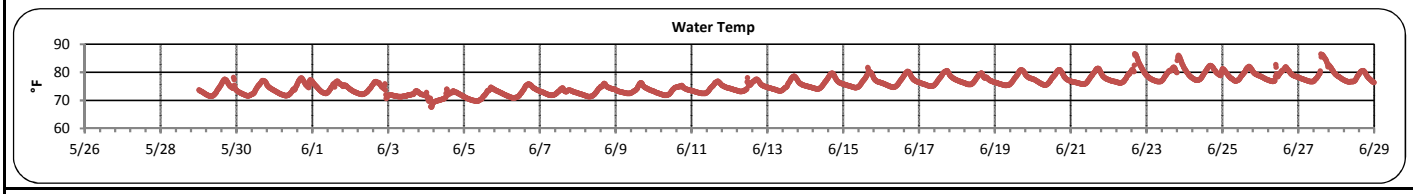
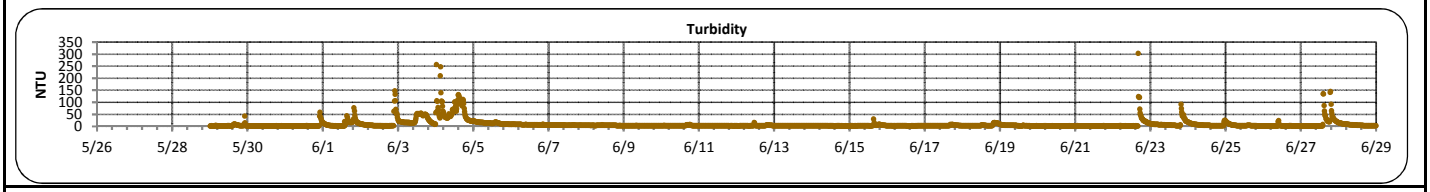
Rocky Branch A (May 26, 2015 -- June 28, 2015)

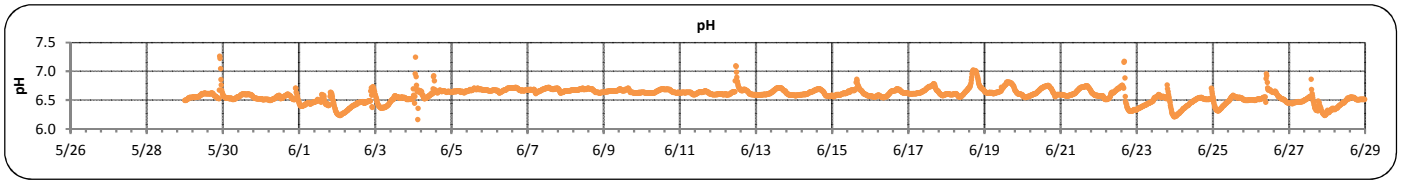
PARAMETER	DESCRIPTION
STREAM NAME:	Rocky Branch
LOCATION:	Maxcy Gregg Park
ADDRESS:	1650 Park Circle Columbia, SC 29201
COORDINATES:	34.995864, -81.021842
TMDL/IMPAIRMENT:	Fecal Coliform
NEIGHBORING LANDUSE:	Residential and commercial
SPATIAL LOCATION:	Most upstream site
TOTAL NO. STORMS OVER 0.1 INCH:	8
MAX. DAILY RAINFALL:	4.0 inches
TOTAL RAINFALL (FOR PERIOD):	8.8 inches

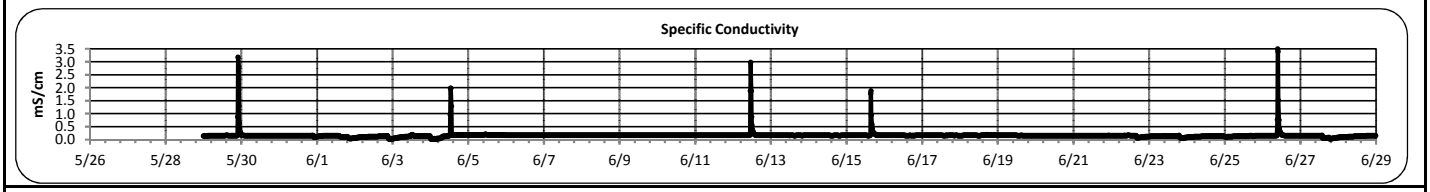
CONTINUOUS WATER QUALITY PARAMETERS:	SUMMARY STATISTICS				
	MINIMUM OBSERVED	MAXIMUM OBSERVED	MEDIAN OBSERVED	MEAN OBSERVED	STANDARD DEVIATION
STAGE (FT):	1.2	9.8	1.3	1.3	0.3
TEMPERATURE (°F):	68	87	76	76	3
TURBIDITY (NTU):	1	303	3	9	19
pH:	6.2	7.3	6.6	6.6	0.1
SPECIFIC CONDUCTIVITY (mS/cm):	0.011	3.494	0.158	0.160	0.159
DISSOLVED OXYGEN (mg/L):	4.4	9.3	7.0	7.0	0.9

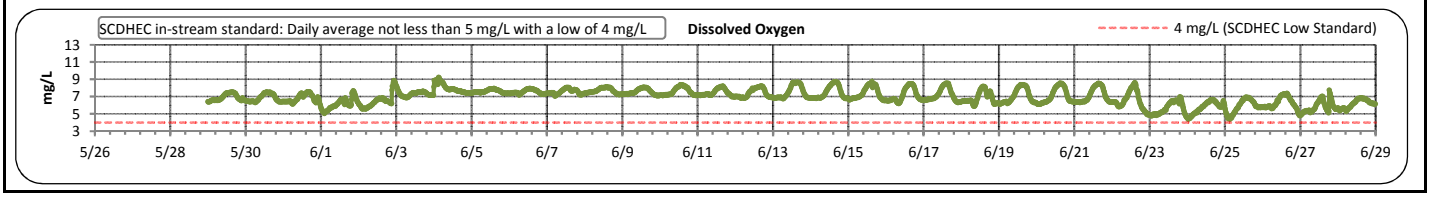












Note: Data gaps appear when the sonde is removed for calibration or when the flow depth is below the sensors

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Continuous Water Quality
Monitoring Periodic Report

Rocky Branch A (May 26, 2015 -- June 28, 2015)

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	
	Time	Result	Time	Result	Time	Result	Time	Result
Escherichia coli (MPN/100mL)								
Total Suspended Solids (mg/L)								
Total Phosphorus (mg/L)								
Total Nitrogen (mg/L)								

Note:

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Continuous Water Quality Monitoring Periodic Report

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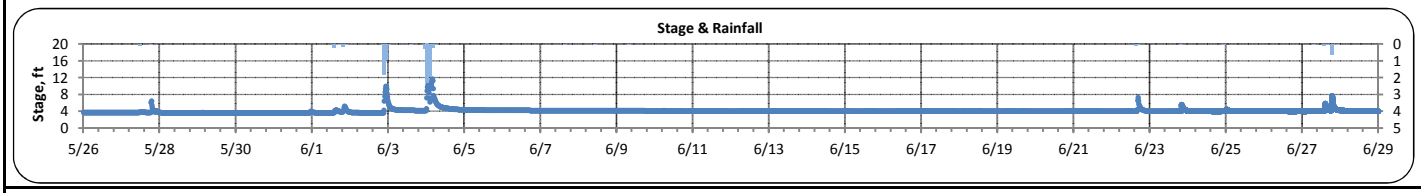
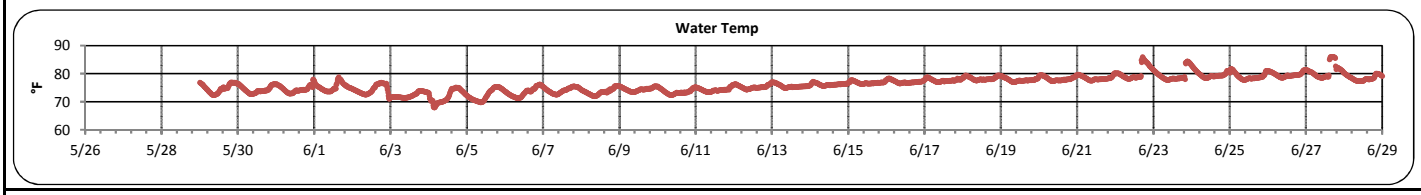
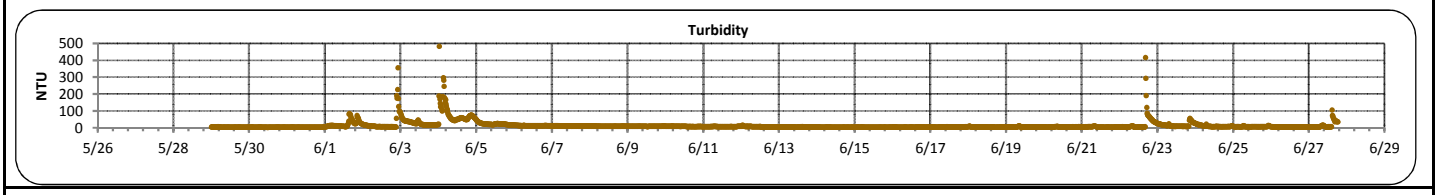
Rocky Branch B (May 26, 2015 -- June 28, 2015)

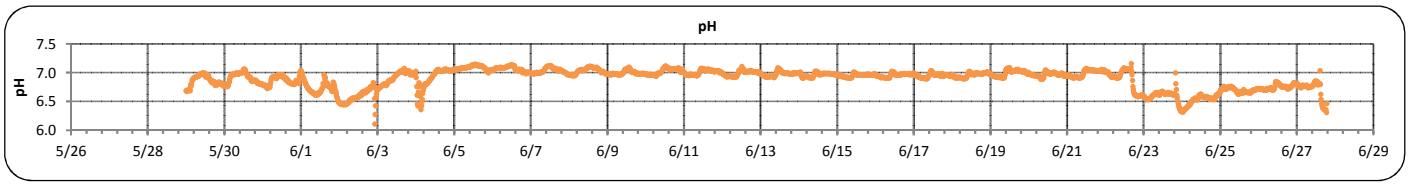
PARAMETER	DESCRIPTION
STREAM NAME:	Rocky Branch
LOCATION:	Olympia Ave Crossing
ADDRESS:	510 Heyward St Columbia, SC 29201
COORDINATES:	33.982578, -81.035036
TMDL/IMPAIRMENT:	Fecal Coliform
NEIGHBORING LANDUSE:	Residential and commercial
SPATIAL LOCATION:	Most Downstream Site
TOTAL NO. STORMS OVER 0.1 INCH:	5
MAX. DAILY RAINFALL:	4.7 inches
TOTAL RAINFALL (FOR PERIOD):	9.7 inches

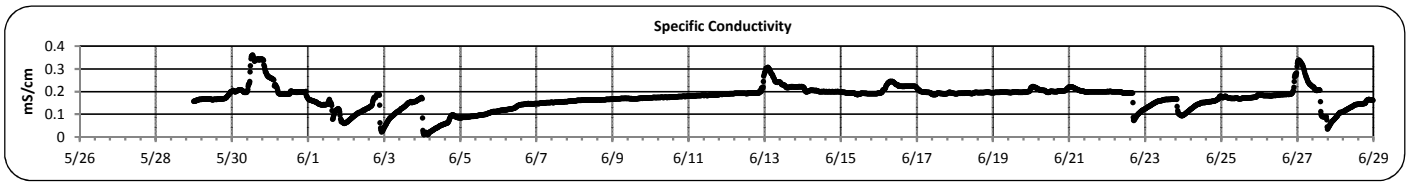
CONTINUOUS WATER QUALITY PARAMETERS:	SUMMARY STATISTICS				
	MINIMUM OBSERVED	MAXIMUM OBSERVED	MEDIAN OBSERVED	MEAN OBSERVED	STANDARD DEVIATION
STAGE (FT):	3.6	11.7	4.0	4.1	0.4
TEMPERATURE (°F):	68	86	76	76	3
TURBIDITY (NTU):	1	482	6	12	25
pH:	6.1	7.2	7.0	6.9	0.2
SPECIFIC CONDUCTIVITY (mS/cm):	0.011	0.362	0.180069734	0.172	0.051
DISSOLVED OXYGEN (mg/L):	2.8	9.4	7.2	6.9	1.2

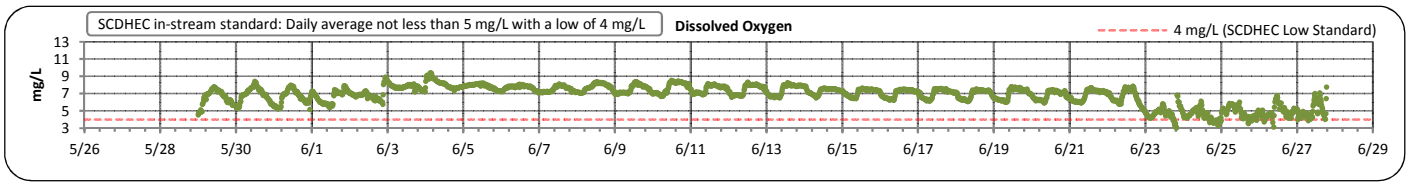












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Continuous Water Quality
Monitoring Periodic Report

Rocky Branch B (May 26, 2015 -- June 28, 2015)

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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	
	Time	Result	Time	Result	Time	Result	Time	Result
Escherichia coli (MPN/100mL)								
Total Suspended Solids (mg/L)								
Total Phosphorus (mg/L)								
Total Nitrogen (mg/L)								

Note:

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