

# Kinley Creek Monitoring Sites

## Monitoring Data Summary for August 19<sup>th</sup>, 2017 – September 18<sup>th</sup>, 2017

### *Data Gaps*

- The KINA station experienced submergence issues that affected specific conductivity from the date of sonde deployment until August 22<sup>nd</sup> and from August 27<sup>th</sup> until the August 31<sup>st</sup> storm event. These periods were deleted from the dataset.

### *SCDHEC Standards*

- Neither of the Kinley Creek monitoring stations recorded any pH readings outside of the acceptable SCDHEC range of 6 to 8.5.
- The KINA and KINB stations recorded average DO concentrations of 6.1 mg/L and 5.4 mg/L, respectively. These averages were well above the SCDHEC daily average standard minimum of 5 mg/L.
- The instantaneous minimum DO values recorded at the KINA and KINB stations were 3.4 mg/L and 3.9 mg/L, respectively. All of the low DO minimums occurred during rain events at both Kinley Creek sites.

### *Storm Events*

- The Kinley rain gauge recorded five storm events over this deployment period, resulting in 4.2 inches of precipitation.
- Both KINA and KINB stations recorded typical storm event responses during this monitoring period.
- The rain event from September 11<sup>th</sup> – 12<sup>th</sup> were related to impacts from Hurricane Irma.
- The maximum antecedent dry time since the last significant precipitation event (at least 0.1 inches) was approximately 13.8 days in the Kinley Creek watershed, and occurred prior to the August 25<sup>th</sup> storm event.

### *Potential Illicit Discharges and Abnormal Events*

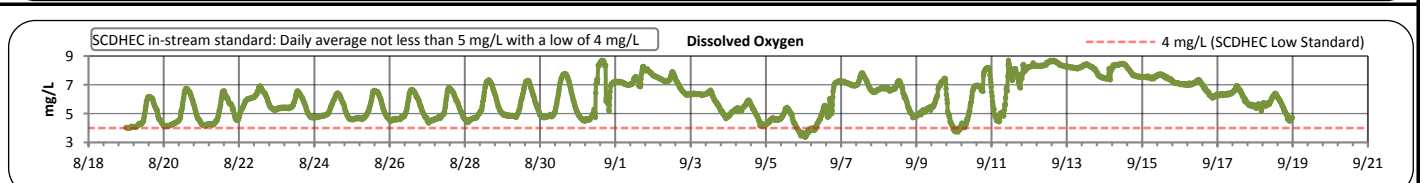
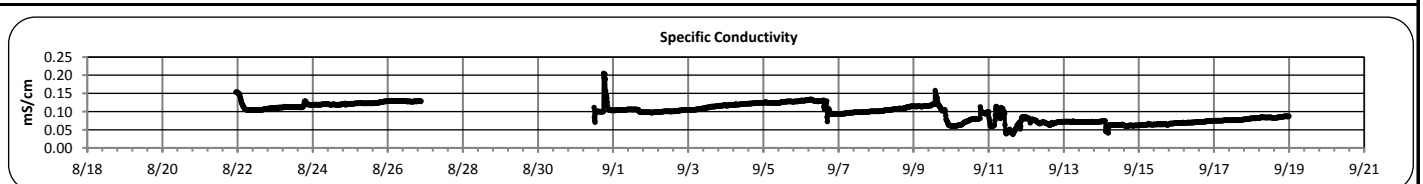
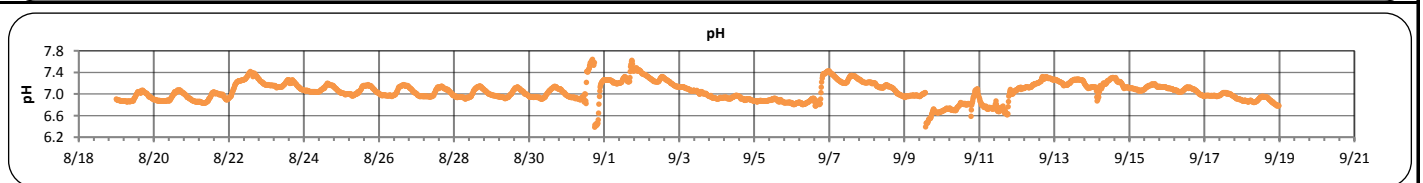
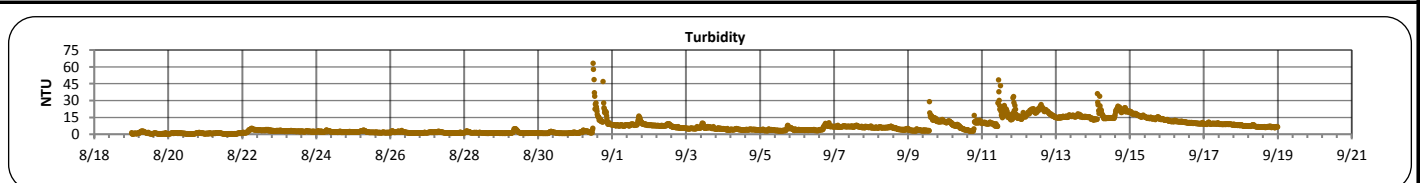
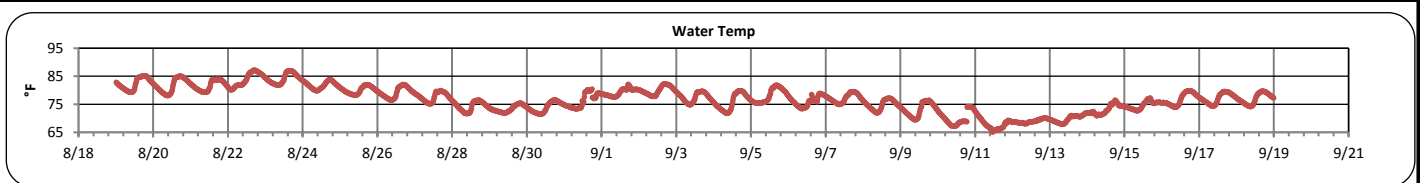
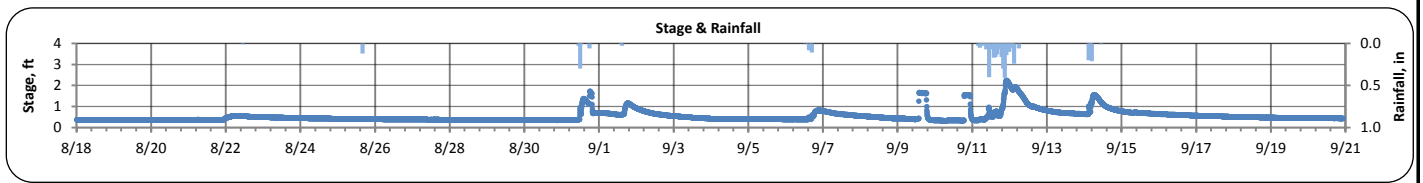
- The stage at the KINA and KINB station increased drastically on September 9<sup>th</sup> and 10<sup>th</sup>, most likely as a result of upstream lake levels being lowered in preparation for Hurricane Irma.

### *Flow Measurements*

- There were not any flow measurements taken at the Kinley Creek stations during this deployment period.

**Kinley Creek A (August 18, 2017 -- September 20, 2017)**

PARAMETER	DESCRIPTION	CONTINUOUS WATER QUALITY PARAMETERS:	SUMMARY STATISTICS				
			MINIMUM OBSERVED	MAXIMUM OBSERVED	MEDIAN OBSERVED	MEAN OBSERVED	STANDARD DEVIATION
STREAM NAME:	Kinley Creek	STAGE (FT):	0.3	2.2	0.5	0.6	0.3
LOCATION:	Longhorn Steakhouse	TEMPERATURE (°F):	65	87	77	77	5
ADDRESS:	171 Harbison Blvd Columbia, SC 29212	TURBIDITY (NTU):	1	63	4	7	6
COORDINATES:	34.069897, -81.164592	pH:	6.4	7.7	7.0	7.0	0.2
TMDL/IMPAIRMENT:	Fecal Coliform	SPECIFIC CONDUCTIVITY (mS/cm):	0.037	0.206	0.102	0.098	0.024
NEIGHBORING LANDUSE:	Residential and commercial	DISSOLVED OXYGEN (mg/L):	3.4	8.7	6.1	6.1	1.3
SPATIAL LOCATION:	Most upstream site						
TOTAL NO. STORMS OVER 0.1 INCH:	5						
MAX. DAILY RAINFALL:	2.6 inches						
TOTAL RAINFALL (FOR PERIOD):	4.2 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**

**Kinley Creek A (August 18, 2017 -- September 20, 2017)**

**Explanation of Statistics:**

<b>MINIMUM OBSERVED</b>	The minimum of the values recorded by the datasonde in 15 minute intervals.
<b>MAXIMUM OBSERVED</b>	The maximum of the values recorded by the datasonde in 15 minute intervals.
<b>MEDIAN OBSERVED</b>	The median of all the values recorded by the datasonde in 15 minute intervals.
<b>MEAN OBSERVED</b>	The average of all the values recorded by the datasonde in 15 minute intervals.
<b>STANDARD DEVIATION</b>	The standard deviation of all the values recorded by the datasonde in 15 minute intervals.

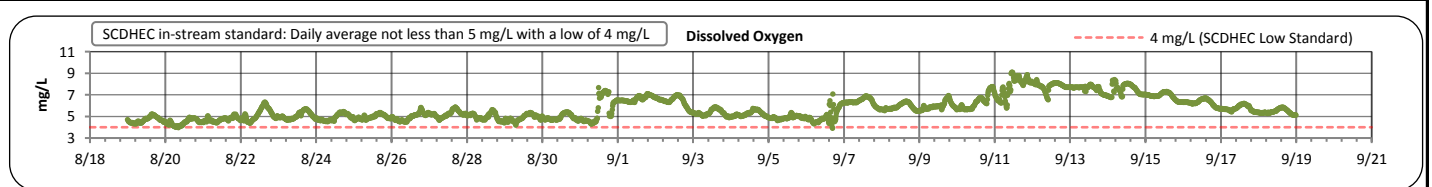
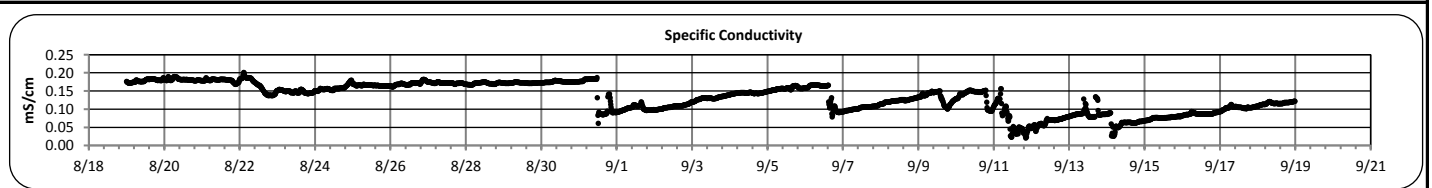
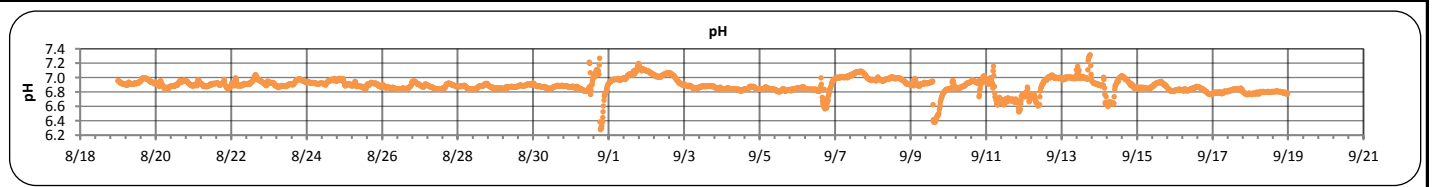
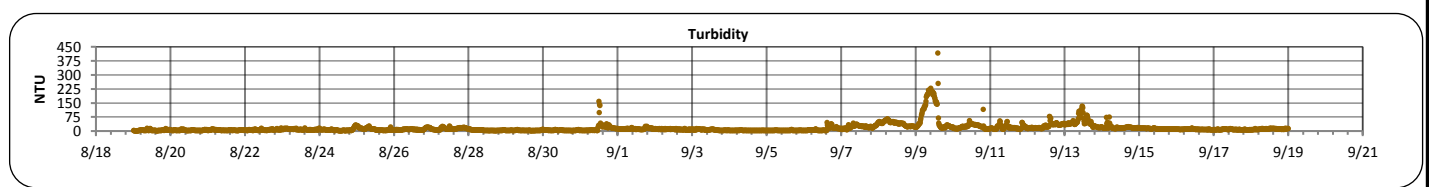
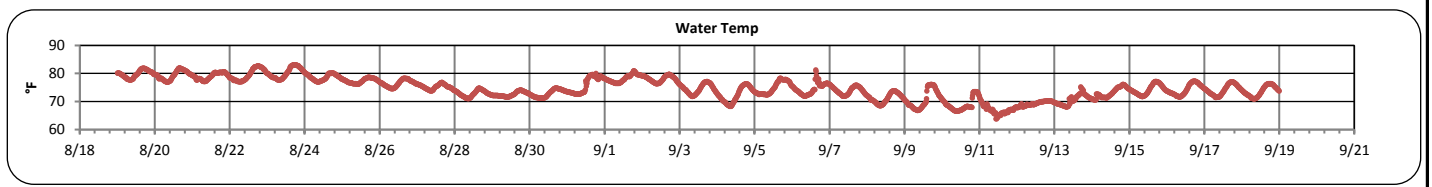
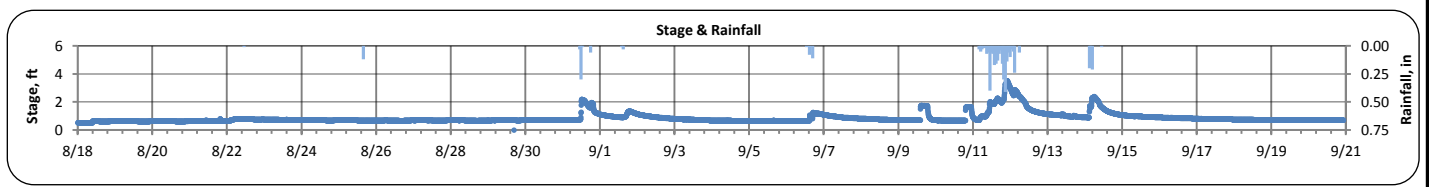
**Grab Sample Data:**

Analyte (units)	Sample 1		Sample 2		Sample 3		Sample 4	
	9/6/2017							
	Time	Result	Time	Result	Time	Result	Time	Result
<i>Escherichia coli</i> (MPN/100mL)	9:31	1,290						
Total Suspended Solids (mg/L)								
Total Phosphorus (mg/L)								
Total Nitrogen (mg/L)								

Note: The sample collected on 9/6/2017 was collected during dry weather conditions.

**Kinley Creek B (August 18, 2017 -- September 20, 2017)**

PARAMETER	DESCRIPTION	CONTINUOUS WATER QUALITY PARAMETERS:	SUMMARY STATISTICS				
			MINIMUM OBSERVED	MAXIMUM OBSERVED	MEDIAN OBSERVED	MEAN OBSERVED	STANDARD DEVIATION
STREAM NAME:	Kinley Creek	STAGE (FT):	0.0	3.5	0.7	0.9	0.4
LOCATION:	Broken Hill Rd	TEMPERATURE (°F):	64	83	75	75	4
ADDRESS:	609 Broken Hill Rd Columbia, SC 29212	TURBIDITY (NTU):	2	418	10	17	25
COORDINATES:	34.06635, -81.159986	pH:	6.3	7.3	6.9	6.9	0.1
TMDL/IMPAIRMENT:	Fecal Coliform	SPECIFIC CONDUCTIVITY (mS/cm):	0.021	0.201	0.143	0.133	0.040
NEIGHBORING LANDUSE:	Residential and commercial	DISSOLVED OXYGEN (mg/L):	3.9	9.1	5.4	5.7	1.1
SPATIAL LOCATION:	Most downstream site						
TOTAL NO. STORMS OVER 0.1 INCH:	5						
MAX. DAILY RAINFALL:	2.6 inches						
TOTAL RAINFALL (FOR PERIOD):	4.2 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**

**Kinley Creek B (August 18, 2017 -- September 20, 2017)**

**Explanation of Statistics:**

<b>MINIMUM OBSERVED</b>	The minimum of the values recorded by the datasonde in 15 minute intervals.
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<b>MEAN OBSERVED</b>	The average of all the values recorded by the datasonde in 15 minute intervals.
<b>STANDARD DEVIATION</b>	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	
	9/6/2017							
	Time	Result	Time	Result	Time	Result	Time	Result
<i>Escherichia coli</i> (MPN/100mL)	9:49	126						
Total Suspended Solids (mg/L)								
Total Phosphorus (mg/L)								
Total Nitrogen (mg/L)								

Note: The sample collected on 9/6/2017 was collected during dry weather conditions.