

Kinley Creek Monitoring Sites

Monitoring Data Summary for September 21st, 2017 – October 25th, 2017

Data Gaps

- The KINA station did not experience any data gaps during this deployment period.
- The KINB station experienced some turbidity noise from October 11th-13th and that short period of data was removed from the dataset.

SCDHEC Standards

- Neither of the Kinley Creek monitoring stations recorded pH readings outside of the SCDHEC acceptable range of 6 to 8.5.
- The KINA station recorded an average DO concentration of 5.6 mg/L. This average was above the SCDHEC daily average standard minimum of 5 mg/L. The KINB station recorded an average DO concentration of 4.7 mg/L which is slightly lower than the daily average standard minimum.
- The instantaneous minimum DO values recorded at the KINA and KINB stations were 3.9 mg/L and 2.1 mg/L, respectively. The DO minimums at KINA were recorded during a dry period on October 13th. The minimum DO concentrations at KINB were recorded from October 11th-18th during a dry period when the temperature was seasonally warm for October.

Storm Events

- The Kinley rain gauge recorded four storm events over this deployment period, resulting in 0.9 inches of precipitation.
- Both KINA and KINB stations recorded typical storm event responses during this monitoring period.
- The maximum antecedent dry time since the last significant precipitation event (at least 0.1 inches) was approximately 23.1 days in the Kinley Creek watershed occurring prior to the October 7th storm event.

Potential Illicit Discharges and Abnormal Events

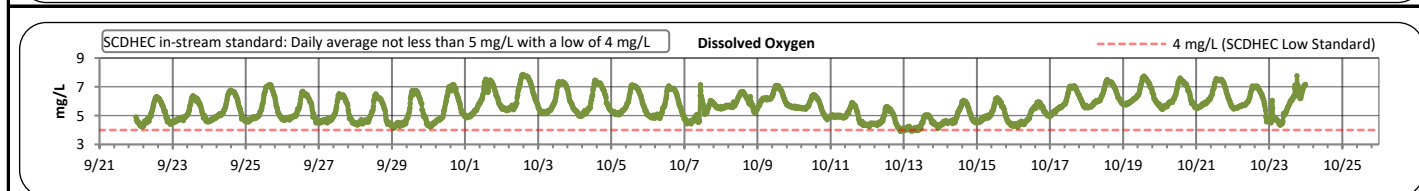
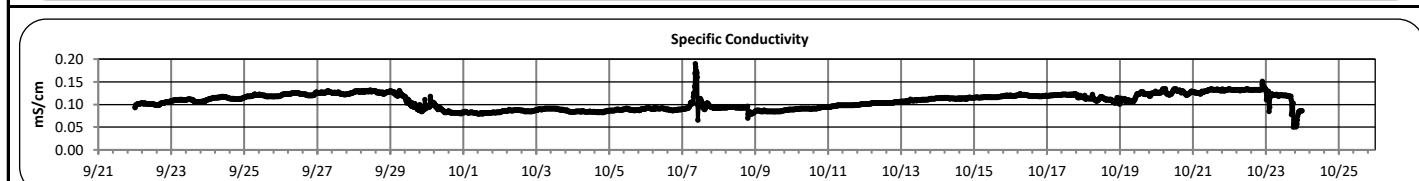
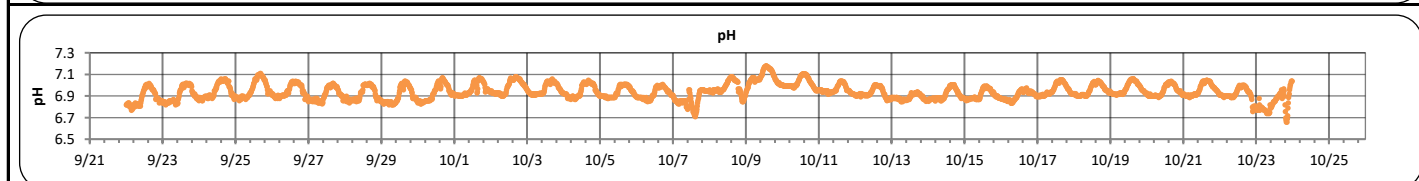
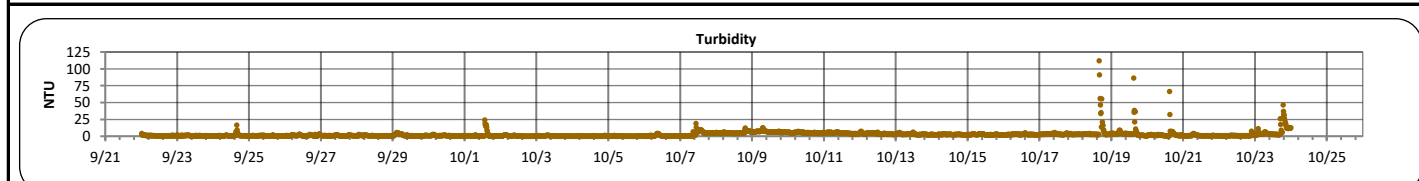
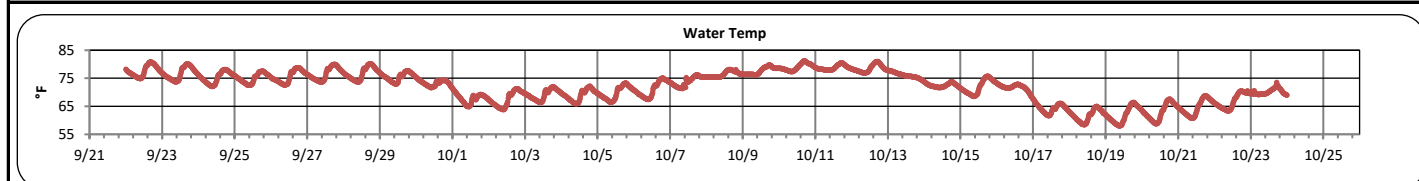
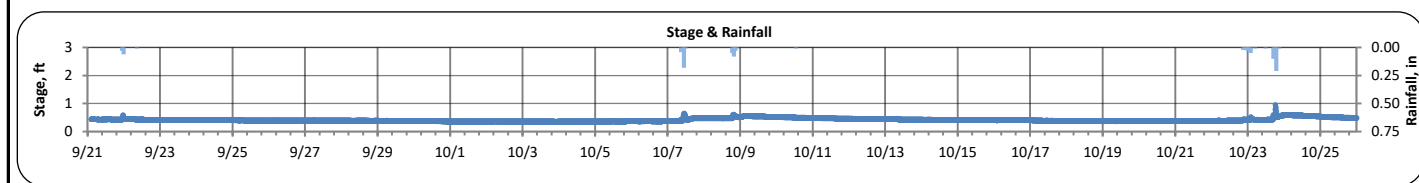
- KINA experienced some turbidity spikes during a dry period from October 18th-20th.

Flow Measurements

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

Kinley Creek A (September 21, 2017 -- October 25, 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):	0.4	1.0	0.4	0.4	0.1
LOCATION:	Longhorn Steakhouse	TEMPERATURE (°F):	58	81	73	72	5
ADDRESS:	171 Harbison Blvd Columbia, SC 29212	TURBIDITY (NTU):	1	112	2	3	5
COORDINATES:	34.069897, -81.164592	pH:	6.7	7.2	6.9	6.9	0.1
TMDL/IMPAIRMENT:	Fecal Coliform	SPECIFIC CONDUCTIVITY (mS/cm):	0.05	0.19	0.110	0.107	0.017
NEIGHBORING LANDUSE:	Residential and commercial	DISSOLVED OXYGEN (mg/L):	3.9	7.9	5.6	5.6	0.9
SPATIAL LOCATION:	Most upstream site						
TOTAL NO. STORMS OVER 0.1 INCH:	4						
MAX. DAILY RAINFALL:	0.4 inches						
TOTAL RAINFALL (FOR PERIOD):	0.9 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 (September 21, 2017 -- October 25, 2017)

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.

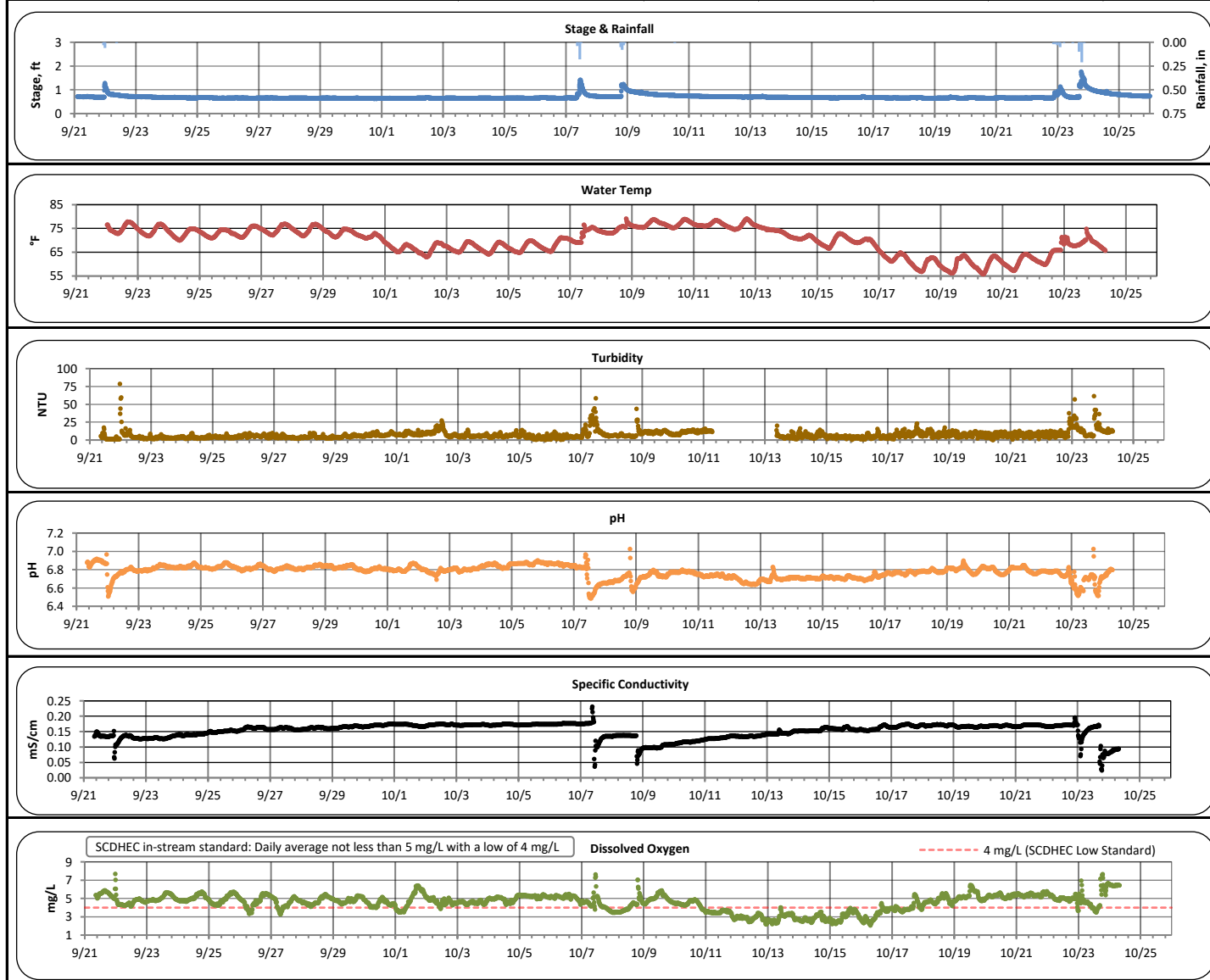
Grab Sample Data:

Analyte (units)	Sample 1		Sample 2		Sample 3		Sample 4	
	10/23/2017							
	Time	Result	Time	Result	Time	Result	Time	Result
<i>Escherichia coli</i> (MPN/100mL)	9:04	2,038						
Total Suspended Solids (mg/L)	9:04	7.4						
Total Phosphorus (mg/L)	9:04	0.16						
Total Nitrogen (mg/L)	9:04	0.78						

Note: The sample collected on 10/23/2017 was collected during dry weather conditions.

Kinley Creek B (September 21, 2017 -- October 25, 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):	0.6	1.8	0.7	0.7	0.1
LOCATION:	Broken Hill Rd	TEMPERATURE (°F):	56	79	71	70	6
ADDRESS:	609 Broken Hill Rd Columbia, SC 29212	TURBIDITY (NTU):	1	79	6	7	5
COORDINATES:	34.06635, -81.159986	pH:	6.5	7.0	6.8	6.8	0.1
TMDL/IMPAIRMENT:	Fecal Coliform	SPECIFIC CONDUCTIVITY (mS/cm):	0.024	0.231	0.162	0.153	0.023
NEIGHBORING LANDUSE:	Residential and commercial	DISSOLVED OXYGEN (mg/L):	2.1	7.7	4.7	4.5	0.9
SPATIAL LOCATION:	Most downstream site						
TOTAL NO. STORMS OVER 0.1 INCH:	4						
MAX. DAILY RAINFALL:	0.4 inches						
TOTAL RAINFALL (FOR PERIOD):	0.9 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 (September 21, 2017 -- October 25, 2017)

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	
	10/23/2017							
	Time	Result	Time	Result	Time	Result	Time	Result
<i>Escherichia coli</i> (MPN/100mL)	9:21	776						
Total Suspended Solids (mg/L)	9:21	16.9						
Total Phosphorus (mg/L)	9:21	0.24						
Total Nitrogen (mg/L)	9:21	1.16						

Note: The sample collected on 10/23/2017 was collected during dry weather conditions.