

# Kinley Creek Monitoring Sites

## Monitoring Data Summary for December 6<sup>th</sup>, 2018 – January 8<sup>th</sup>, 2019

### *Data Gaps*

- The KINA station did not experience any interruptions in the dataset.
- The KINB station experienced fouling turbidity from December 28<sup>th</sup> – 30<sup>th</sup>. This period of turbidity data was removed from the dataset.

### *SCDHEC Standards*

- Both Kinley Creek monitoring stations recorded pH readings that were within the SCDHEC acceptable range of 6 to 8.5.
- Both the KINA and KINB station recorded an average DO concentration of 10 mg/L, which is well above the SCDHEC daily average standard of 5 mg/L.
- The instantaneous minimum DO values recorded at the KINA and KINB stations were 8.2 mg/L and 6.6 mg/L, respectively, which are both above the SCDHEC instantaneous minimum standard of 4.0 mg/L.

### *Storm Events*

- The rain gauge along Kinley Creek recorded 9 storm events during this deployment period that resulted in 8.2 inches of precipitation.
- Both KINA and KINB stations recorded typical response patterns to the recorded storm events during this monitoring period.
- The maximum antecedent dry time since the last significant precipitation event (at least 0.1 inches) was approximately 7.4 days in the Kinley Creek watershed which occurred prior to the storm event on December 28<sup>th</sup>.

### *Potential Illicit Discharges and Abnormal Events*

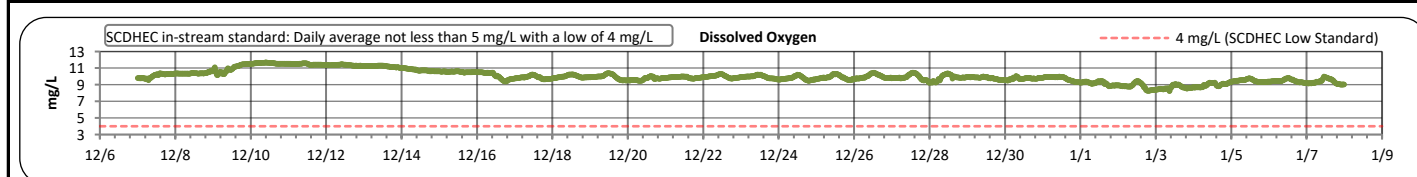
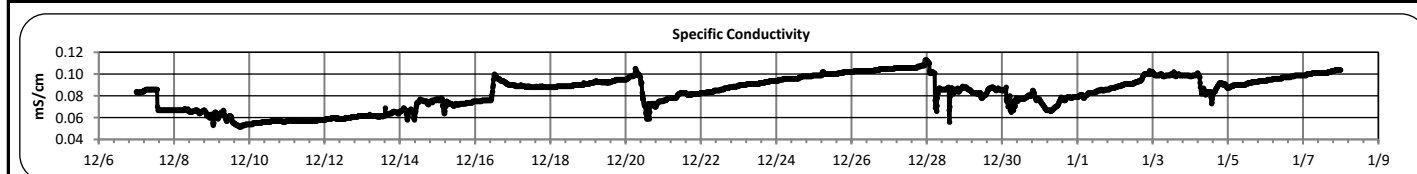
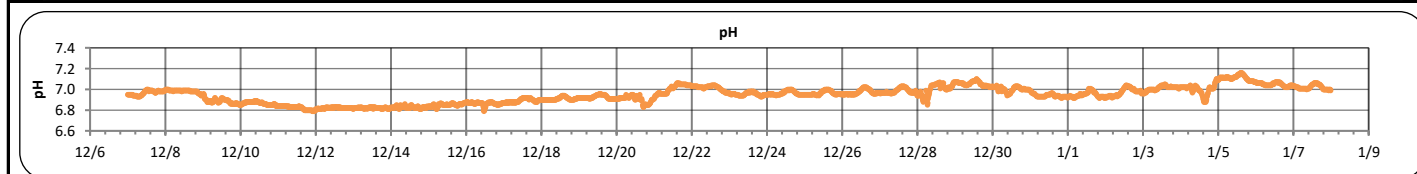
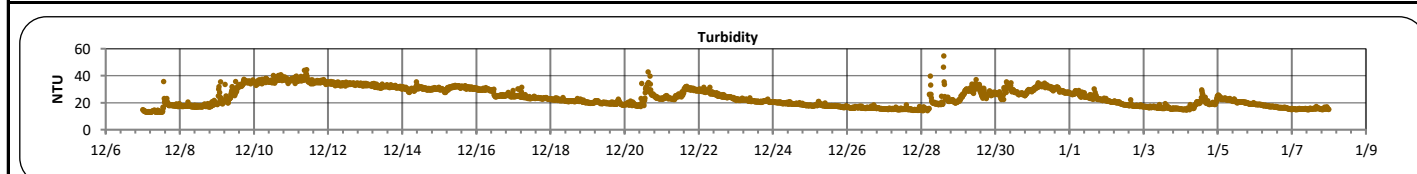
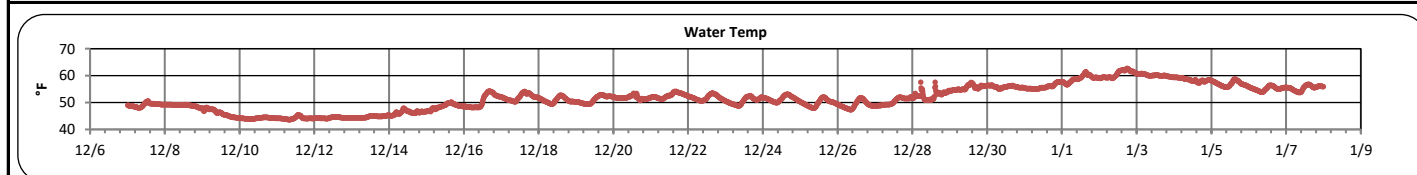
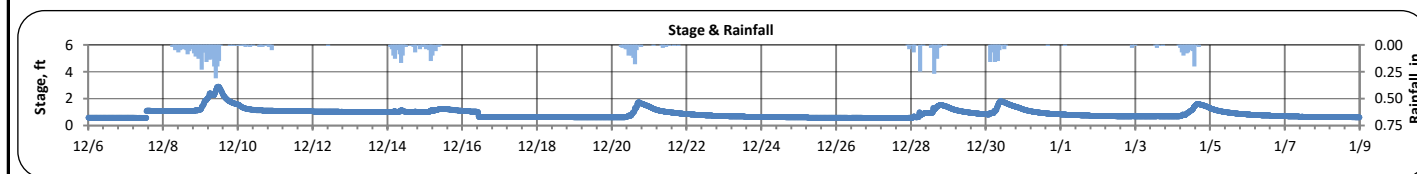
- A sudden increase in stage on December 7<sup>th</sup> coinciding with a decrease in specific conductivity, observed at both KINA and KINB, is likely the result of activity occurring at the dam (Lake Quail Valley) upstream of the KINA station.
- A sudden decrease in stage on December 16<sup>th</sup> coinciding with an increase in specific conductivity, observed at both KINA and KINB, is also likely the result of activity occurring at the dam (Lake Quail Valley) upstream of the KINA station.

### *Flow Measurements*

- No flow measurements were taken in the Kinley Creek watershed during this deployment period.

**Kinley Creek A (December 6, 2018 -- January 8, 2019)**

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	2.9	0.8	0.9	0.3
LOCATION:	Longhorn Steakhouse	TEMPERATURE (°F):	44	63	52	52	5
ADDRESS:	171 Harbison Blvd Columbia, SC 29212	TURBIDITY (NTU):	13	55	23	24	7
COORDINATES:	34.069897, -81.164592	pH:	6.8	7.2	7.0	6.9	0.1
TMDL/IMPAIRMENT:	Fecal Coliform	SPECIFIC CONDUCTIVITY (mS/cm):	0.052	0.113	0.086	0.083	0.015
NEIGHBORING LANDUSE:	Residential and commercial	DISSOLVED OXYGEN (mg/L):	8.2	11.7	9.9	10.0	0.7
SPATIAL LOCATION:	Most upstream site						
TOTAL NO. STORMS OVER 0.1 INCH:	9						
MAX. DAILY RAINFALL:	1.9 inches						
TOTAL RAINFALL (FOR PERIOD):	8.2 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 (December 6, 2018 -- January 8, 2019)**

**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.

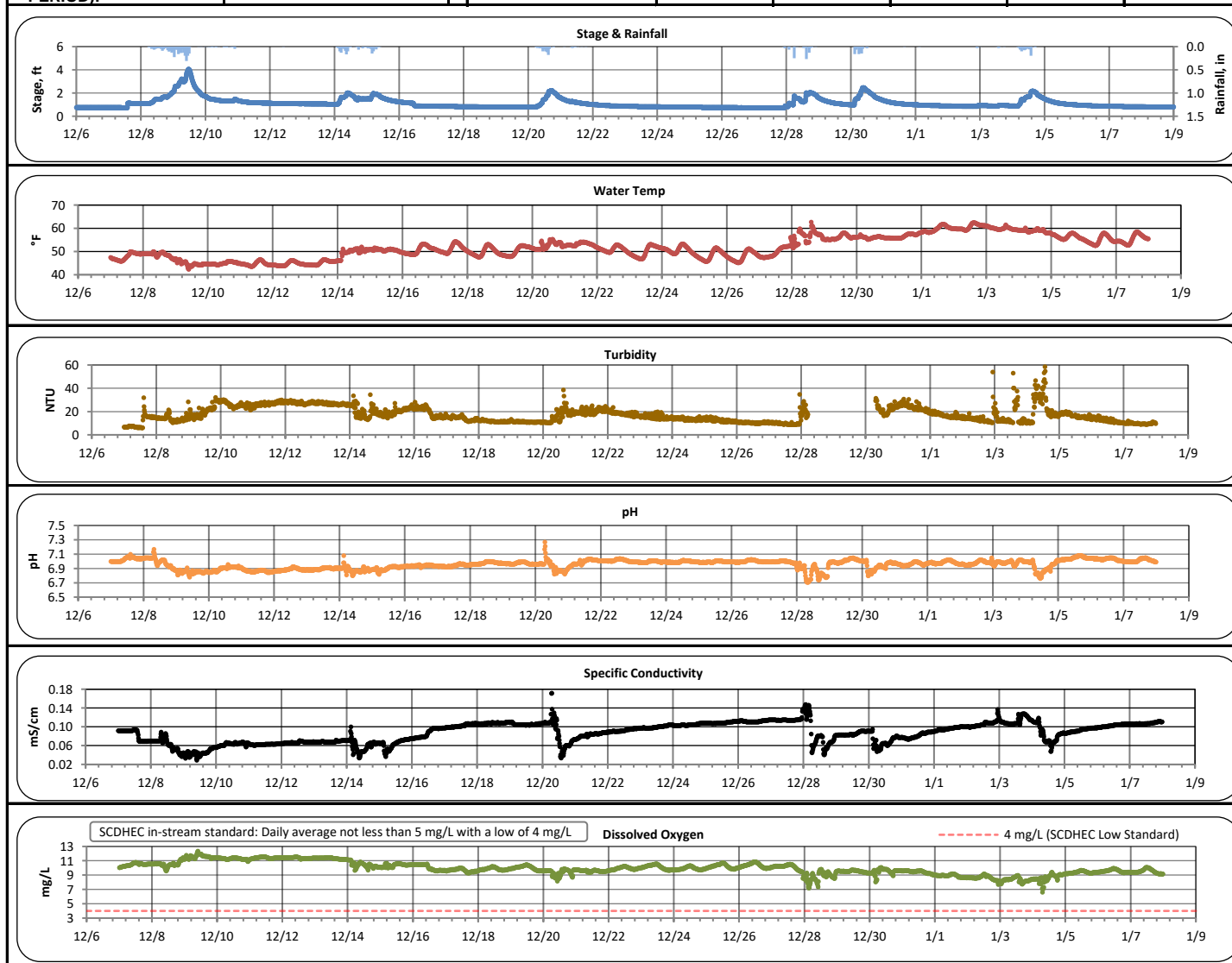
**Grab Sample Data:**

Analyte (units)	Sample 1		Sample 2		Sample 3		Sample 4	
	12/6/2018		12/20/2018		12/20/2018			
	Time	Result	Time	Result	Time	Result	Time	Result
<i>Escherichia coli</i> (MPN/100mL)	13:23	20	9:58	1040	10:24	1714		
Total Suspended Solids (mg/L)								
Total Phosphorus (mg/L)								
Total Nitrogen (mg/L)								

Note:

**Kinley Creek B (December 6, 2018 -- January 8, 2019)**

PARAMETER	DESCRIPTION	CONTINUOUS WATER QUALITY PARAMETERS:	SUMMARY STATISTICS				
			MINIMUM OBSERVED	MAXIMUM OBSERVED	MEDIAN OBSERVED	MEAN OBSERVED	STANDARD DEVIATION
STREAM NAME:	Kinley Creek	STAGE (FT):	0.7	4.1	1.0	1.1	0.5
LOCATION:	Broken Hill Rd	TEMPERATURE (°F):	42	63	51	52	5
ADDRESS:	609 Broken Hill Rd Columbia, SC 29212	TURBIDITY (NTU):	6	59	16	17	7
COORDINATES:	34.06635, -81.159986	pH:	6.7	7.3	7.0	7.0	0.1
TMDL/IMPAIRMENT:	Fecal Coliform	SPECIFIC CONDUCTIVITY (mS/cm):	0.029	0.172	0.092	0.088	0.021
NEIGHBORING LANDUSE:	Residential and commercial	DISSOLVED OXYGEN (mg/L):	6.6	12.4	9.9	10.0	0.9
SPATIAL LOCATION:	Most downstream site						
TOTAL NO. STORMS OVER 0.1 INCH:	9						
MAX. DAILY RAINFALL:	1.9 inches						
TOTAL RAINFALL (FOR PERIOD):	8.2 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 (December 6, 2018 -- January 8, 2019)**

**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.

**Sampled Data:**

Analyte (units)	Sample 1		Sample 2		Sample 3		Sample 4	
	12/6/2018		12/20/2018		12/20/2018			
	Time	Result	Time	Result	Time	Result	Time	Result
<i>Escherichia coli</i> (MPN/100mL)	13:33	374	10:13	5818	10:35	2290		
Total Suspended Solids (mg/L)								
Total Phosphorus (mg/L)								
Total Nitrogen (mg/L)								

Note: