

Kinley Creek Monitoring Sites

Monitoring Data Summary for November 7th, 2019 – December 11th, 2019

Data Gaps

- The KINA monitoring station did not experience any interruptions in the data during this monitoring period.
- The KINB monitoring station experienced a brief period of fouled turbidity data from November 28th-30th that 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.
- The KINA and KINB station recorded average DO concentrations of 7.7 mg/L and 8.7 mg/L respectively, which are both well above the SCDHEC daily average standard of 5 mg/L.
- The instantaneous minimum DO value recorded at the KINA station was 3.9 mg/L, which is below the SCDHEC instantaneous minimum standard of 4 mg/L. These low DO values were recorded during a storm event on November 7th.
- The instantaneous minimum DO value recorded at the KINB station was 6.1 mg/L, which is above the SCDHEC instantaneous minimum standard of 4 mg/L.

Storm Events

- The rain gauge along Kinley Creek recorded 9 storm events during this deployment period that resulted in a total of 3.1 inches of precipitation.
- Both Kinley Creek monitoring stations recorded typical storm response patterns during this monitoring period.
- The maximum antecedent dry time since the last significant precipitation event (at least 0.1 inches) was approximately 9.4 days in the Kinley Creek watershed, occurring prior to the storm event on December 10th.

Potential Illicit Discharges and Abnormal Events

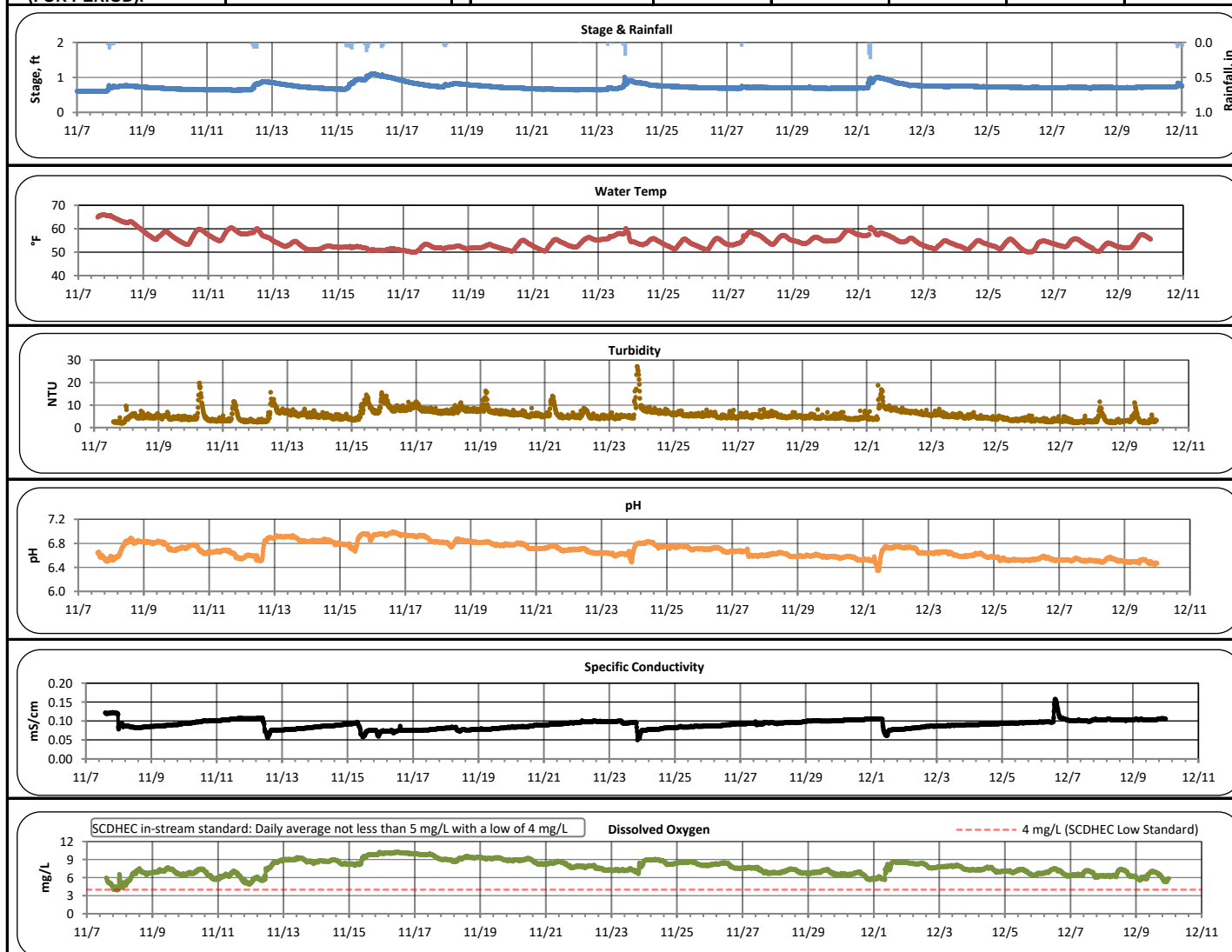
- At the KINA station, there were several observations of increased turbidity levels that occurred when there were no storm events. These instances occurred on the following dates: November 10th, 11th, 19th, 21st, December 8th, and 9th.
- A potential illicit discharge activity was observed at both Kinley Creek stations on December 6th at the KINA station and on December 6th-7th at the KINB station, causing specific conductivity to increase.

Flow Measurements

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

Kinley Creek A (November 7, 2019 - December 11, 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	1.1	0.7	0.7	0.1
LOCATION:	Longhorn Steakhouse	TEMPERATURE (°F):	50	66	54	55	3
ADDRESS:	171 Harbison Blvd Columbia, SC 29212	TURBIDITY (NTU):	2	27	5	6	3
COORDINATES:	34.069897, -81.164592	pH:	6.4	7.0	6.7	6.7	0.1
TMDL/IMPAIRMENT:	Fecal Coliform	SPECIFIC CONDUCTIVITY (mS/cm):	0.05	0.158	0.092	0.091	0.011
NEIGHBORING LANDUSE:	Residential and commercial	DISSOLVED OXYGEN (mg/L):	3.9	10.3	7.6	7.7	1.2
SPATIAL LOCATION:	Most upstream site						
TOTAL NO. STORMS OVER 0.1 INCH:	9						
MAX. DAILY RAINFALL:	0.7 inches						
TOTAL RAINFALL (FOR PERIOD):	3.1 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 (November 7, 2019 - December 11, 2019)

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.

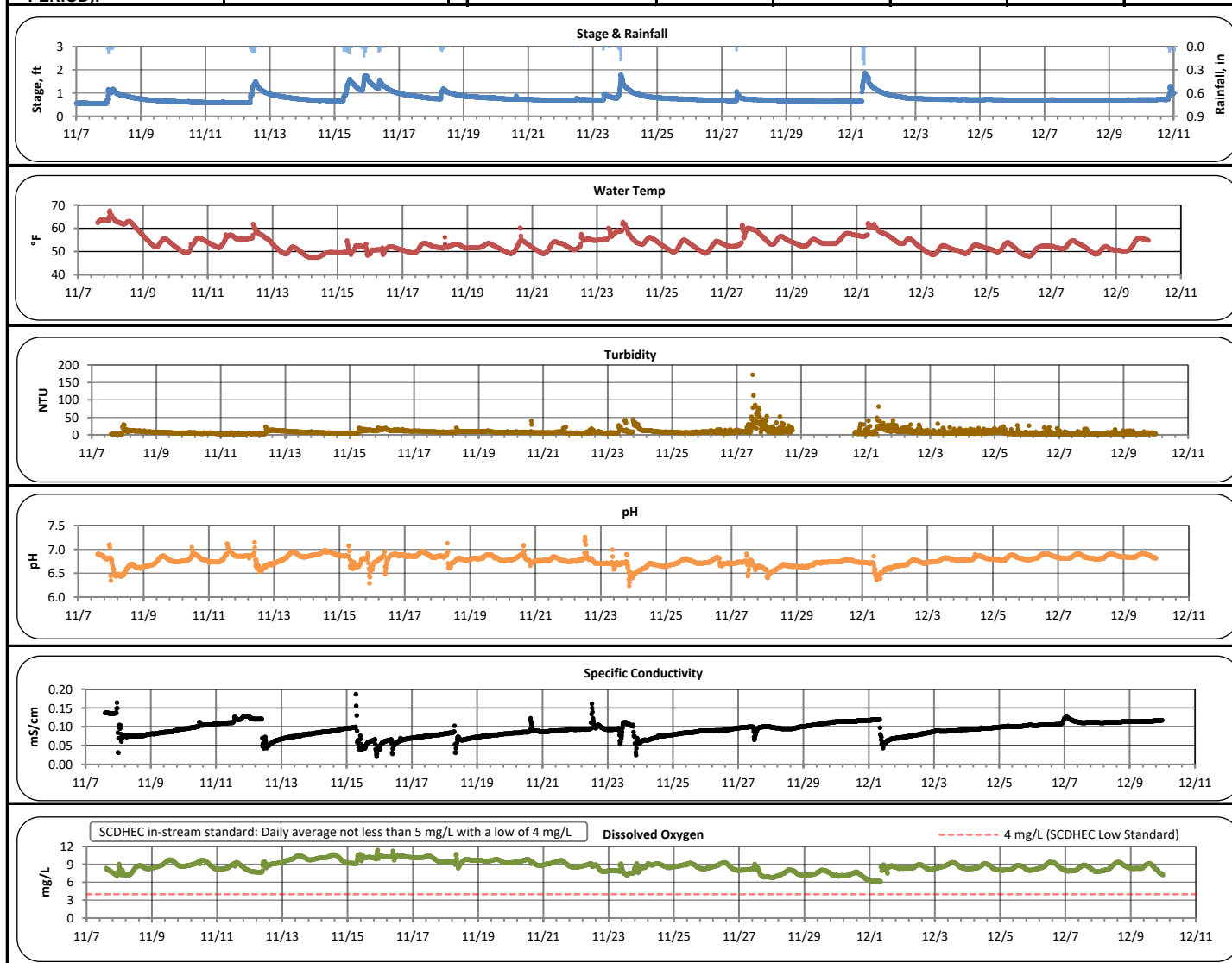
Grab Sample Data:

Analyte (units)	Sample 1		Sample 2		Sample 3		Sample 4	
	11/21/2019		12/5/2019					
	Time	Result	Time	Result	Time	Result	Time	Result
<i>Escherichia coli</i> (MPN/100mL)	9:27	104	8:45	1,170				
Total Suspended Solids (mg/L)								
Total Phosphorus (mg/L)								
Total Nitrogen (mg/L)								

Note: Both samples were taken during dry weather conditions.

Kinley Creek B (November 7, 2019 - December 11, 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	1.9	0.7	0.8	0.2
LOCATION:	Broken Hill Rd	TEMPERATURE (°F):	47	68	53	53	3
ADDRESS:	609 Broken Hill Rd Columbia, SC 29212	TURBIDITY (NTU):	2	172	7	9	8
COORDINATES:	34.06635, -81.159986	pH:	6.2	7.3	6.8	6.8	0.1
TMDL/IMPAIRMENT:	Fecal Coliform	SPECIFIC CONDUCTIVITY (mS/cm):	0.021	0.187	0.093	0.092	0.019
NEIGHBORING LANDUSE:	Residential and commercial	DISSOLVED OXYGEN (mg/L):	6.1	11.4	8.7	8.7	0.9
SPATIAL LOCATION:	Most downstream site						
TOTAL NO. STORMS OVER 0.1 INCH:	9						
MAX. DAILY RAINFALL:	0.7 inches						
TOTAL RAINFALL (FOR PERIOD):	3.1 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 (November 7, 2019 - December 11, 2019)

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	
	11/21/2019		12/5/2019					
	Time	Result	Time	Result	Time	Result	Time	Result
<i>Escherichia coli</i> (MPN/100mL)	9:10	236	9:02	350				
Total Suspended Solids (mg/L)								
Total Phosphorus (mg/L)								
Total Nitrogen (mg/L)								

Note: Both samples were taken during dry weather conditions.