

# Kinley Creek Monitoring Sites

## Monitoring Data Summary for November 1<sup>st</sup>, 2018 – December 5<sup>th</sup>, 2018

### *Data Gaps*

- Both Kinley Creek stations experienced noisy turbidity data shortly after the peak of the storm event that occurred on November 15<sup>th</sup>. Turbidity data for KINA was removed from November 15<sup>th</sup>-17<sup>th</sup> and turbidity data for KINB was removed from November 15<sup>th</sup>-20<sup>th</sup>.

### *SCDHEC Standards*

- Both Kinley Creek monitoring stations recorded pH readings that were within the SCDHEC acceptable range of 6 to 8.5.
- The KINA station recorded an average DO concentration of 9.5 mg/L and the KINB station recorded an average DO concentration of 9.2 mg/L which are both well above the SCDHEC daily average standard of 5 mg/L.
- The instantaneous minimum DO values recorded at the KINA and KINB stations were 7.0 mg/L and 5.2 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 7.5 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 8.5 days in the Kinley Creek watershed which occurred prior to the November 23<sup>rd</sup> storm event.

### *Potential Illicit Discharges and Abnormal Events*

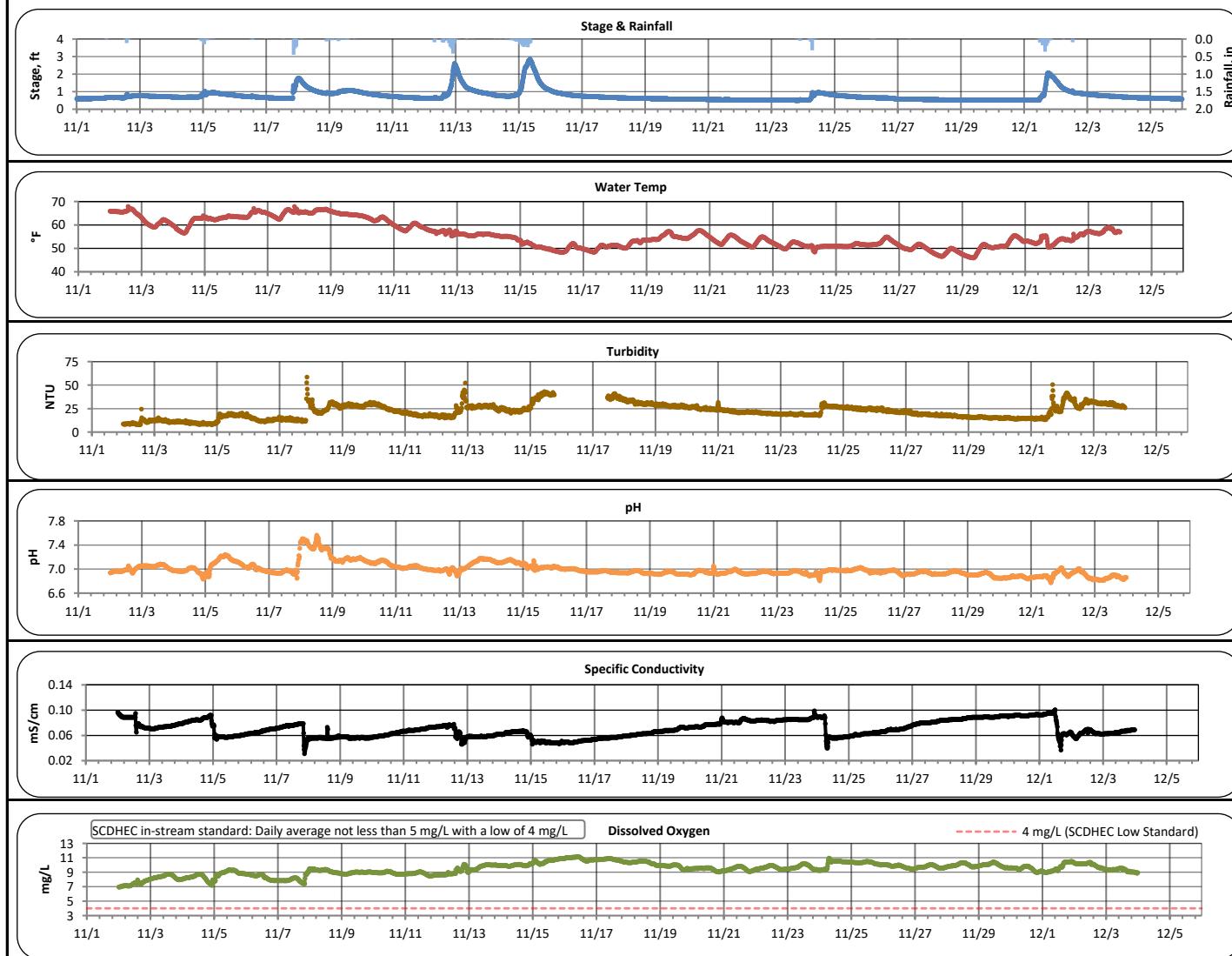
- A small illicit discharge may have occurred at the SMIA station for just a few hours overnight on November 20<sup>th</sup>, causing the specific conductivity, pH, and turbidity to increase slightly.

### *Flow Measurements*

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

**Kinley Creek A (November 1, 2018 -- December 5, 2018)**

PARAMETER	DESCRIPTION	CONTINUOUS WATER QUALITY PARAMETERS:	SUMMARY STATISTICS				
			MINIMUM OBSERVED	MAXIMUM OBSERVED	MEDIAN OBSERVED	MEAN OBSERVED	STANDARD DEVIATION
STREAM NAME:	Kinley Creek	STAGE (FT):	0.5	2.9	0.7	0.8	0.3
LOCATION:	Longhorn Steakhouse	TEMPERATURE (°F):	46	68	55	56	6
ADDRESS:	171 Harbison Blvd Columbia, SC 29212	TURBIDITY (NTU):	8	59	21	22	8
COORDINATES:	34.069897, -81.164592	pH:	6.8	7.6	7.0	7.0	0.1
TMDL/IMPAIRMENT:	Fecal Coliform	SPECIFIC CONDUCTIVITY (mS/cm):	0.031	0.101	0.068	0.070	0.013
NEIGHBORING LANDUSE:	Residential and commercial	DISSOLVED OXYGEN (mg/L):	7.0	11.1	9.6	9.5	0.8
SPATIAL LOCATION:	Most upstream site						
TOTAL NO. STORMS OVER 0.1 INCH:	9						
MAX. DAILY RAINFALL:	1.6 inches						
TOTAL RAINFALL (FOR PERIOD):	7.5 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 1, 2018 -- December 5, 2018)**

**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.

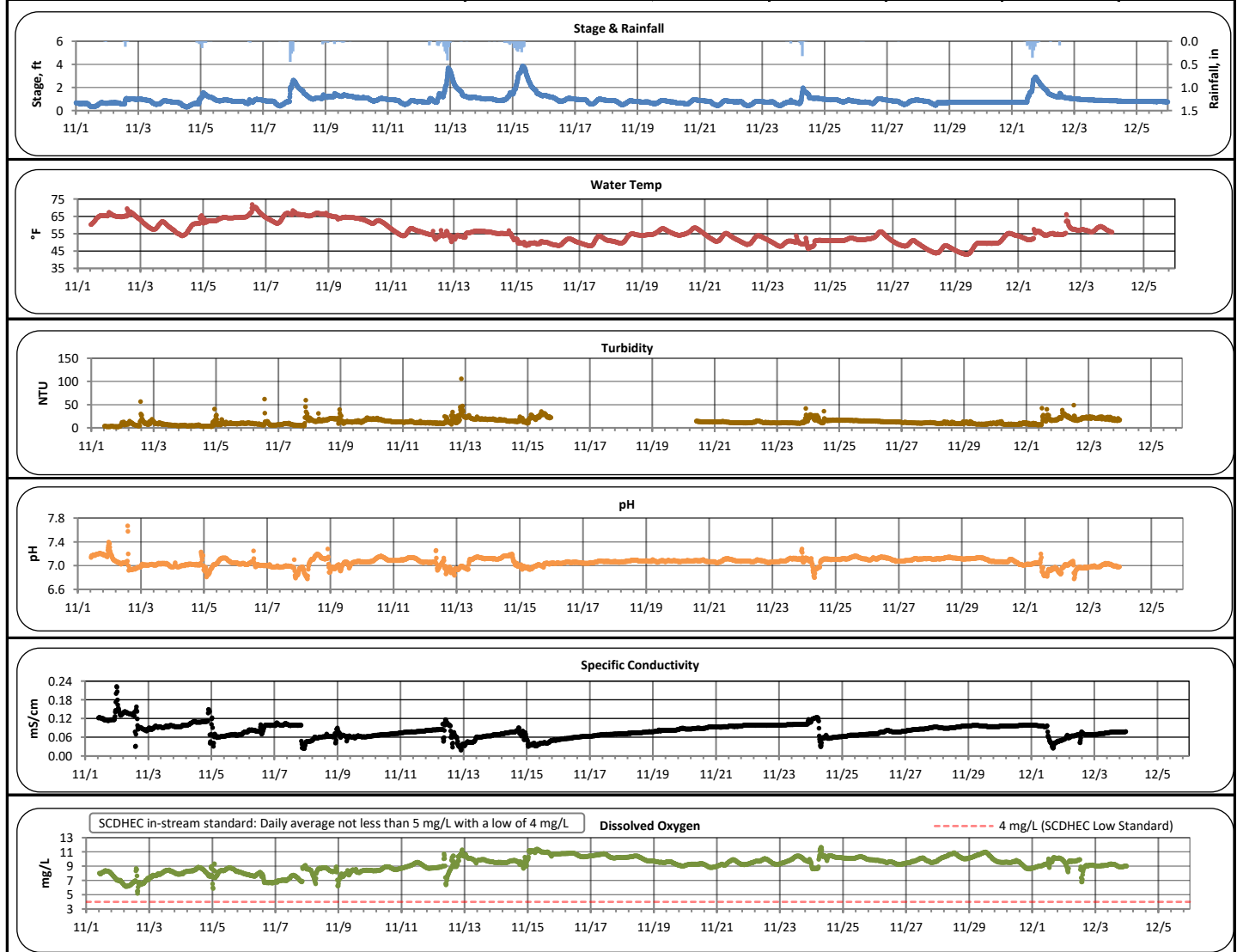
**Grab Sample Data:**

Analyte (units)	Sample 1		Sample 2		Sample 3		Sample 4	
	11/20/2018							
	Time	Result	Time	Result	Time	Result	Time	Result
<i>Escherichia coli</i> (MPN/100mL)	9:15	40						
Total Suspended Solids (mg/L)								
Total Phosphorus (mg/L)								
Total Nitrogen (mg/L)								

Note:

**Kinley Creek B (November 1, 2018 -- December 5, 2018)**

PARAMETER	DESCRIPTION	CONTINUOUS WATER QUALITY PARAMETERS:	SUMMARY STATISTICS				
			MINIMUM OBSERVED	MAXIMUM OBSERVED	MEDIAN OBSERVED	MEAN OBSERVED	STANDARD DEVIATION
STREAM NAME:	Kinley Creek	STAGE (FT):	-0.2	3.9	0.8	1.0	0.5
LOCATION:	Broken Hill Rd	TEMPERATURE (°F):	43	72	55	56	6
ADDRESS:	609 Broken Hill Rd Columbia, SC 29212	TURBIDITY (NTU):	3	106	12	13	6
COORDINATES:	34.06635, -81.159986	pH:	6.8	7.7	7.1	7.1	0.1
TMDL/IMPAIRMENT:	Fecal Coliform	SPECIFIC CONDUCTIVITY (mS/cm):	0.019	0.223	0.079	0.080	0.021
NEIGHBORING LANDUSE:	Residential and commercial	DISSOLVED OXYGEN (mg/L):	5.2	11.7	9.4	9.2	1.1
SPATIAL LOCATION:	Most downstream site						
TOTAL NO. STORMS OVER 0.1 INCH:	9						
MAX. DAILY RAINFALL:	1.6 inches						
TOTAL RAINFALL (FOR PERIOD):	7.5 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 1, 2018 -- December 5, 2018)**

**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	
	11/20/2018							
	Time	Result	Time	Result	Time	Result	Time	Result
<i>Escherichia coli</i> (MPN/100mL)	9:32	172						
Total Suspended Solids (mg/L)								
Total Phosphorus (mg/L)								
Total Nitrogen (mg/L)								

Note: