

# Kinley Creek Monitoring Sites

## Monitoring Data Summary for December 12<sup>th</sup>, 2019 – January 16<sup>th</sup>, 2020

### *Data Gaps*

- The KINA sonde was removed from the field on December 14<sup>th</sup> because the sonde well was bent which caused the sensors to be unsubmerged. Maintenance was required at the site to fix the sonde well before the sonde could be redeployed.
- The KINB monitoring station did not experience any interruptions in the data during this monitoring period.

### *SCDHEC Standards*

- The KINA station sonde was only deployed for one day, so the statistics are based off one day of recorded data.
- 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 10.7 mg/L and 9.9 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 7.4 mg/L and 7.6 mg/L at the KINB station, which are both 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 13 inches of precipitation.
- The KINA station sonde was only deployed for one day and recorded data for one storm event on December 13<sup>th</sup>.
- At the KINB station, the pH and specific conductivity increased during two storm events that occurred on January 10<sup>th</sup> and 11<sup>th</sup> which is not the typical storm response pattern for those parameters.
- The maximum antecedent dry time since the last significant precipitation event (at least 0.1 inches) was approximately 7.5 days in the Kinley Creek watershed, occurring prior to the January 12<sup>th</sup> storm event.

### *Potential Illicit Discharges and Abnormal Events*

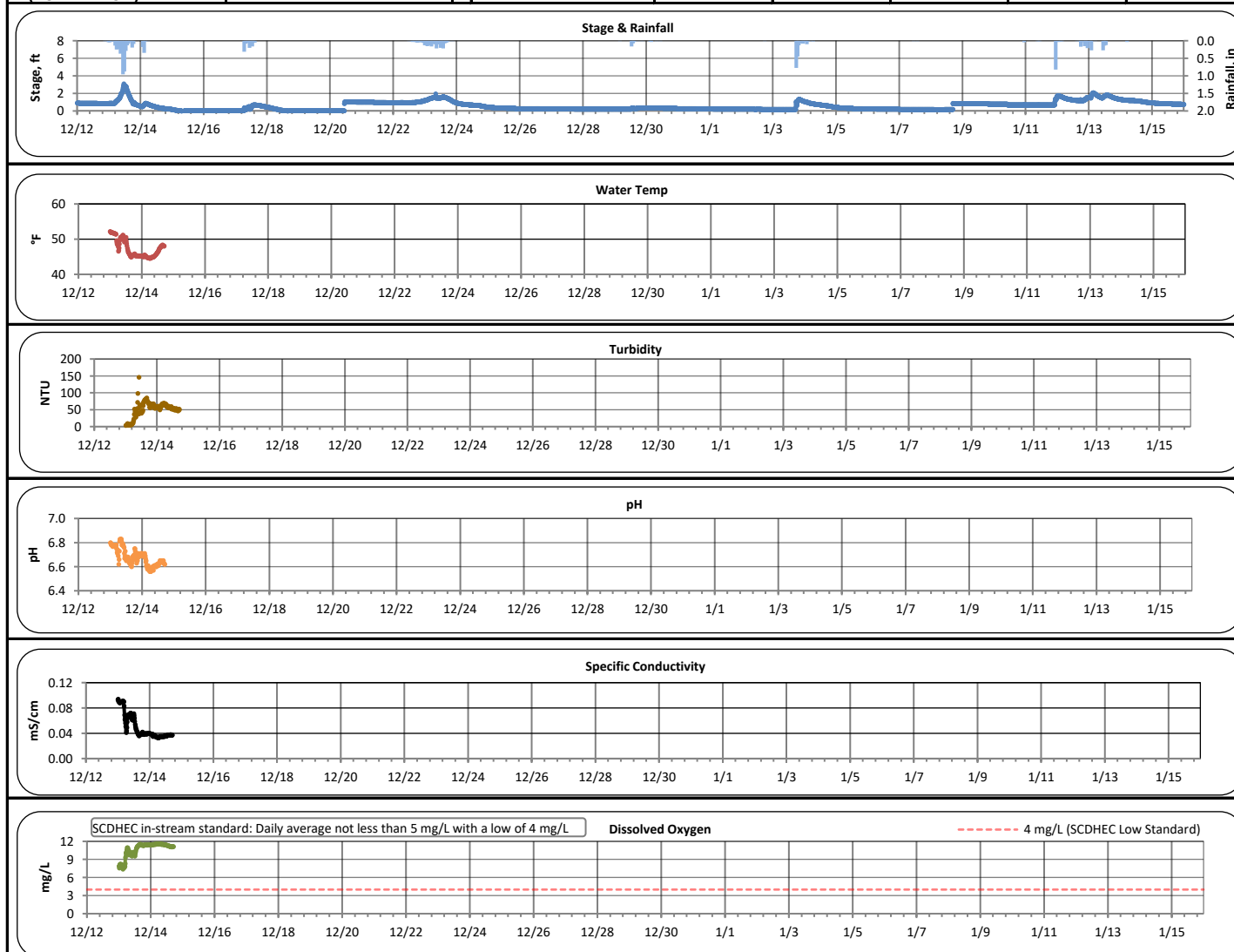
- The KINA station sonde was only deployed for one day and there were no potential illicit discharges or abnormal events that occurred during that time.
- No potential illicit discharges or abnormal events were observed at the KINB station during this monitoring period.

### *Flow Measurements*

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

**Kinley Creek A (December 12, 2019 - January 16, 2020)**

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	3.1	0.4	0.6	0.5
LOCATION:	Longhorn Steakhouse	TEMPERATURE (°F):	45	52	46	47	2
ADDRESS:	171 Harbison Blvd Columbia, SC 29212	TURBIDITY (NTU):	3	146	56	51	22
COORDINATES:	34.069897, -81.164592	pH:	6.6	6.8	6.7	6.7	0.1
TMDL/IMPAIRMENT:	Fecal Coliform	SPECIFIC CONDUCTIVITY (mS/cm):	0.033	0.094	0.039	0.049	0.019
NEIGHBORING LANDUSE:	Residential and commercial	DISSOLVED OXYGEN (mg/L):	7.4	11.6	11.4	10.7	1.2
SPATIAL LOCATION:	Most upstream site						
TOTAL NO. STORMS OVER 0.1 INCH:	9						
MAX. DAILY RAINFALL:	4.2 inches						
TOTAL RAINFALL (FOR PERIOD):	13.0 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 12, 2019 - January 16, 2020)**

**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.

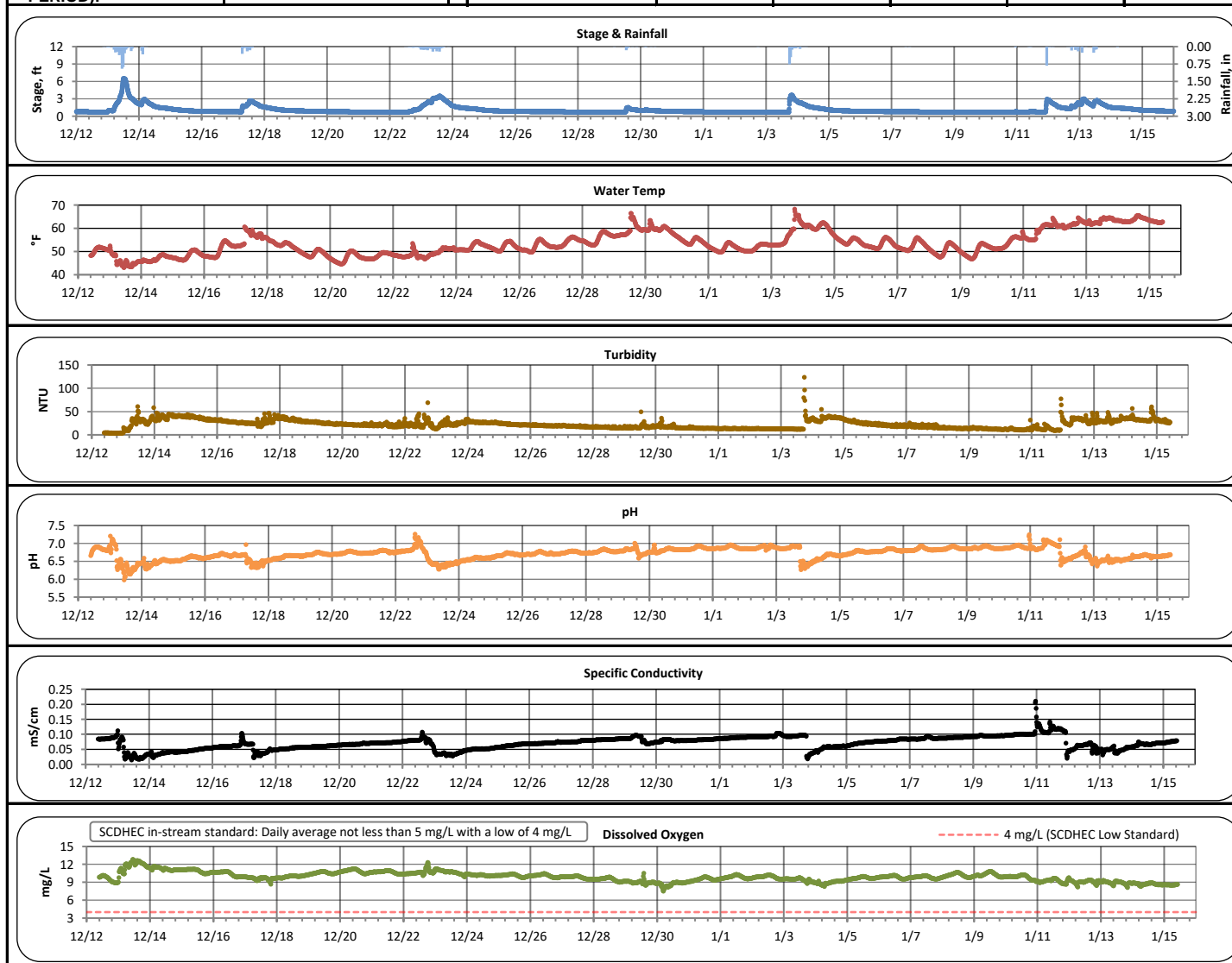
**Grab Sample Data:**

Analyte (units)	Sample 1		Sample 2		Sample 3		Sample 4	
	1/9/2020		1/13/2020		1/13/2020			
	Time	Result	Time	Result	Time	Result	Time	Result
<i>Escherichia coli</i> (MPN/100mL)	13:45	126	9:45	4,028	12:00	7308		
Total Suspended Solids (mg/L)								
Total Phosphorus (mg/L)								
Total Nitrogen (mg/L)								

Note: Sample 1 was taken during dry weather conditions. Samples 2 and 3 were taken during wet weather conditions.

**Kinley Creek B (December 12, 2019 - January 16, 2020)**

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	6.5	0.9	1.2	0.7
LOCATION:	Broken Hill Rd	TEMPERATURE (°F):	43	68	53	54	5
ADDRESS:	609 Broken Hill Rd Columbia, SC 29212	TURBIDITY (NTU):	4	124	21	23	9
COORDINATES:	34.06635, -81.159986	pH:	6.0	7.3	6.7	6.7	0.2
TMDL/IMPAIRMENT:	Fecal Coliform	SPECIFIC CONDUCTIVITY (mS/cm):	0.015	0.211	0.072	0.071	0.021
NEIGHBORING LANDUSE:	Residential and commercial	DISSOLVED OXYGEN (mg/L):	7.6	12.9	9.9	9.9	0.8
SPATIAL LOCATION:	Most downstream site						
TOTAL NO. STORMS OVER 0.1 INCH:	9						
MAX. DAILY RAINFALL:	4.2 inches						
TOTAL RAINFALL (FOR PERIOD):	13.0 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 12, 2019 - January 16, 2020)**

**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	
	1/9/2020		1/13/2020		1/13/2020		1/13/2020	
	Time	Result	Time	Result	Time	Result	Time	Result
<i>Escherichia coli</i> (MPN/100mL)	14:03	60	10:10	3570	12:35	5446	14:30	4128
Total Suspended Solids (mg/L)			10:10	26.8	12:35	23.8	14:30	22
Total Phosphorus (mg/L)			10:10	0.078	12:35	0.069	14:30	0.073
Total Nitrogen (mg/L)			10:10	0.81	12:35	0.73	14:30	0.75

Note: Sample 1 was taken during dry weather conditions. Samples 2, 3, and 4 were taken during wet weather conditions.