## Kinley Creek Monitoring Sites

Monitoring Data Summary for July 26<sup>th</sup>, 2019 – August 28<sup>th</sup>, 2019

### Data Gaps

- The KINA station did not have any interruptions in the data during this monitoring period.
- The KINB station experienced a brief period of fouling turbidity from August 13<sup>th</sup>-14<sup>th</sup>, which 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 station recorded an average DO concentration of 4.4 mg/L, which is lower than the SCDHEC daily average standard of 5 mg/L. The KINB station recorded an average DO concentration of 5.3 mg/L, which is above the SCDHEC daily average standard of 5 mg/L.
- The instantaneous minimum DO values recorded at the KINA and KINB stations were 0.2 mg/L and 2.7 mg/L, respectively, which are both below the SCDHEC instantaneous minimum DO standard of 4 mg/L.

#### Storm Events

- The rain gauge along Kinley Creek recorded 8 storm events during this deployment period that resulted in a total of 2.9 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 11.7 days in the Kinley Creek watershed, occurring prior to the storm event on August 4<sup>th</sup>.

#### Potential Illicit Discharges and Abnormal Events

• At the KINA station, a potential illicit discharge was observed on July 24<sup>th</sup> which caused a notable increase in specific conductivity.

#### Flow Measurements

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



## **Continuous Water Quality Monitoring Periodic Report**



### Kinley Creek A (July 26, 2019 -- August 28, 2019)

		CONTINUOUS		SUMMARY STATISTICS			
PARAMETER	DESCRIPTION	WATER QUALITY PARAMETERS:	MINIMUM OBSERVED	MAXIMUM OBSERVED	MEDIAN OBSERVED	MEAN OBSERVED	STANDARD DEVIATION
STREAM NAME:	Kinley Creek	STAGE (FT):	0.5	1.8	0.6	0.6	0.2
LOCATION:	Longhorn Steakhouse						
ADDRESS:	171 Harbison Blvd Columbia, SC 29212	TEMPERATURE (°F):	75	92	81	81	3
COORDINATES:	34.069897, -81.164592	TURBIDITY (NTU):	1	125	1	11	22
TMDL/IMPAIRMENT:	Fecal Coliform	ronsism (mro):	·	120	'	11	22
NEIGHBORING LANDUSE:	Residential and commercial	pH:	6.1	8.0	6.6	6.6	0.1
SPATIAL LOCATION:	Most upstream site						
TOTAL NO. STORMS OVER 0.1 INCH:	8	SPECIFIC CONDUCTIVITY (mS/cm):	0.027	0.181	0.135	0.126	0.027
MAX. DAILY RAINFALL:	1.0 inches	DISSOLVED					
TOTAL RAINFALL (FOR PERIOD):	2.9 inches	OXYGEN (mg/L):	0.2	7.9	4.2	4.4	1.1
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# Continuous Water Quality Monitoring Periodic Report

Kinley Creek A (July 26, 2019 -- August 28, 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	
	8/1/2019							
	Time	Result	Time	Result	Time	Result	Time	Result
Escherichia coli (MPN/100mL)	8:27	3446						
Total Suspended Solids (mg/L)								
Total Phosphorus (mg/L)								
Total Nitrogen (mg/L)								

Note: This sample was taken during dry weather conditions.



# Continuous Water Quality Monitoring Periodic Report



### Kinley Creek B (July 26, 2019 -- August 28, 2019)

		SUMMARY STATISTICS					
PARAMETER	DESCRIPTION	CONTINUOUS WATER QUALITY PARAMETERS:	MINIMUM OBSERVED	MAXIMUM OBSERVED	MEDIAN OBSERVED	MEAN OBSERVED	STANDARD DEVIATION
STREAM NAME:	Kinley Creek	STAGE (FT):	0.1	3.0	0.6	0.6	0.2
LOCATION:	Broken Hill Rd						
ADDRESS:	609 Broken Hill Rd Columbia, SC 29212	TEMPERATURE (°F):	74	94	80	80	3
COORDINATES:	34.06635, -81.159986	TURBIDITY (NTU):	1	120	2	5	8
TMDL/IMPAIRMENT:	Fecal Coliform	TORBIDITY (NTO):	ı	120	2	5	0
NEIGHBORING LANDUSE:	Residential and commercial	pH:	6.2	7.2	6.9	6.9	0.1
SPATIAL LOCATION:	Most downstream site						
TOTAL NO. STORMS OVER 0.1 INCH:	8	SPECIFIC CONDUCTIVITY (mS/cm):	0.021	0.193	0.157	0.146	0.036
MAX. DAILY RAINFALL:	1.0 inches	DISSOLVED OXYGEN	2.7	7.8	5.3	5.3	0.9
TOTAL RAINFALL (FOR PERIOD):	2.9 inches	(mg/L):					
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0.25 0.20 0.15 0.10 0.05 0.00 7/26 7/28 7/		8/7 8/9 8/11	8/13 8/15	8/17 8/			

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 (July 26, 2019 -- August 28, 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	
	8/1/2019							
	Time	Result	Time	Result	Time	Result	Time	Result
Escherichia coli (MPN/100mL)	8:45	418						
Total Suspended								
Solids (mg/L)								
Total Phosphorus (mg/L)								
Total Nitrogen (mg/L)								

Note: This sample was taken during dry weather conditions.