## Kinley Creek Monitoring Sites Monitoring Data Summary for May 4<sup>th</sup>, 2017 – June 7<sup>th</sup>, 2017

### Data Gaps

- The KINA station did not experience any gaps in the data record during this monitoring period.
- The KINB sonde experienced turbidity fouling from May 12<sup>th</sup> May 13<sup>th</sup> and this data was removed from the dataset.

### SCDHEC Standards

- The KINA station did not record any pH readings outside of the acceptable SCDHEC range of 6 to 8.5.
- The KINA station recorded some pH values above the standard maximum of 8. These high values occurred during the storm event on May 22<sup>nd</sup>. The highest pH value recorded was 8.7. The KINB station did not record any violations of the pH standards during this period.
- The KINA and KINB stations recorded average DO concentrations of 6.5 mg/L and 6.0 mg/L, respectively. These averages were well above the SCDHEC daily average standard minimum of 5 mg/L.
- The instantaneous minimum DO values recorded at the KINA and KINB stations were 2.9 mg/L and 3.9mg/L, respectively. The low DO minimums occurred during the same storm event on May 6<sup>th</sup> at the end of the deployment period.

#### Storm Events

- The Kinley rain gauge recorded twelve storm events over this deployment period, resulting in 6.2 inches of precipitation.
- Both stations generally recorded typical storm event responses during this monitoring period.
- The maximum antecedent dry time since the last significant precipitation event (at least 0.1 inches) was approximately 8.4 days in the Kinley Creek watershed, and occurred prior to the May 21<sup>st</sup> storm event.

### Potential Illicit Discharges and Abnormal Events

• At the KINB station, several periods of slightly elevated specific conductivity were recorded. These occurred on May 31<sup>st</sup>, June 1<sup>st</sup>, and 2<sup>nd</sup>.

### Flow Measurements

• There were not any flow measurements taken at any of the Gills Creek stations during this deployment period.



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



## Kinley Creek A (May 4, 2017 -- June 7, 2017)

		CONTINUOUS	SUMMARY STATISTICS					
PARAMETER	DESCRIPTION	WATER QUALITY PARAMETERS:	MINIMUM OBSERVED	MAXIMUM OBSERVED	MEDIAN OBSERVED	MEAN OBSERVED	STANDARD DEVIATION	
STREAM NAME:	Kinley Creek	STAGE (FT):	0.4	2.6	0.5	0.6	0.3	
LOCATION:	Longhorn Steakhouse							
ADDRESS:	171 Harbison Blvd Columbia, SC 29212	TEMPERATURE (°F):	63	84	76	76	4	
COORDINATES:	34.069897, -81.164592	TURBIDITY (NTU):	3	280	9	13	14	
TMDL/IMPAIRMENT:	Fecal Coliform				Ŭ	.0		
NEIGHBORING LANDUSE:	Residential and commercial	pH:	6.6	8.7	7.1	7.1	0.2	
SPATIAL LOCATION:	Most upstream site							
TOTAL NO. STORMS OVER 0.1 INCH:	12	SPECIFIC CONDUCTIVITY (mS/cm):	0.027	0.154	0.088	0.089	0.018	
MAX. DAILY RAINFALL:	0.9 inches	DISSOLVED	2.9	9.7	6.6	6.5	1.2	
TOTAL RAINFALL (FOR PERIOD):	6.2 inches	OXYGEN (mg/L):	2.9	9.7	0.0	0.5	1.2	
# 5 5 4 5/6 5/8	5/10 5/12 5/14 5/:		2 5/24 5	/26 5/28	5/30 6/1	6/3 6/5	1.5	
90 80 70 60 5/4 5/6 5/8		Water Tem /16 5/18 5/20 5/2  Turbidity  5/16 5/18 5/20 5	Marin Company	5/26 5/28	5/30 6/1	6/3 6/5	6/7	
80 70 60 5/4 5/6 5/8	8 5/10 5/12 5/14	Turbidity	22 5/24					
80 70 60 5/4 5/6 5/8 300 250 250 50 5/4 5/6 5/8 300 50 5/4 5/6 5/8	8 5/10 5/12 5/14	Turbidity 5/16 5/18 5/20 5/2  Turbidity 5/16 5/18 5/20 5	22 5/24	5/26 5/28	5/30 6/1	6/3 6/5	6/7	
80 70 60 5/4 5/6 5/8 300 200 150 0 5/4 5/6 5/8 8.5 7.5 7.0 6.5 5/4 5/6 5/8	8 5/10 5/12 5/14 5/10 5/12 5/14 5	Turbidity  5/16 5/18 5/20 5/20  Turbidity  5/16 5/18 5/20 5  pH  Specific Cond	22 5/24 /22 5/24 uctivity	5/26 5/28	5/30 6/1	6/3 6/5	6/7	
80 70 60 5/4 5/6 5/8 300 250 150 150 5/4 5/6 5/8 8.5 7.5 7.0 6.5 5/4 5/6 5/8	8 5/10 5/12 5/14 5/10 5/12 5/14 5	Turbidity  5/16 5/18 5/20 5/2  Turbidity  5/16 5/18 5/20 5  pH  Specific Cond	22 5/24 //22 5/24 uctivity	5/26 5/28	5/30 6/1 5/30 6/1	6/3 6/5	6/7	

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 (May 4, 2017 -- June 7, 2017)

## **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	
(units)	Time	Result	Time	Result	Time	Result	Time	Result
Escherichia coli (MPN/100mL)								
Total Suspended Solids (mg/L)								
Total Phosphorus (mg/L)								
Total Nitrogen (mg/L)								

Note:



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



### Kinley Creek B (May 4, 2017 -- June 7, 2017)

		CONTINUOUS	SUMMARY STATISTICS					
PARAMETER	DESCRIPTION	WATER QUALITY PARAMETERS:	MINIMUM OBSERVED	MAXIMUM OBSERVED	MEDIAN OBSERVED	MEAN OBSERVED	STANDARD DEVIATION	
STREAM NAME:	Kinley Creek	STAGE (FT):	0.6	3.7	0.8	0.9	0.4	
LOCATION:	Broken Hill Rd							
ADDRESS:	609 Broken Hill Rd Columbia, SC 29212	TEMPERATURE (°F):	63	85	74	73	4	
COORDINATES:	34.06635, -81.159986	TURBIDITY (NTU):	2	288	8	12	16	
TMDL/IMPAIRMENT:	Fecal Coliform	TORBIBITT (ITTO):	2	200	o o	12	10	
NEIGHBORING LANDUSE:	Residential and commercial	pH:	6.6	7.5	6.9	6.9	0.1	
SPATIAL LOCATION:	Most downstream site		0.0	7.0	0.0	0.0	0.1	
TOTAL NO. STORMS OVER 0.1 INCH:	12	SPECIFIC CONDUCTIVITY (mS/cm):	0.023	0.186	0.12	0.118	0.038	
MAX. DAILY RAINFALL: TOTAL RAINFALL (FOR	0.9 inches	DISSOLVED OXYGEN (mg/L):	3.9	9.1	5.8	6.0	1.0	
PERIOD):	0.2 110100							
# 6 # 6 # 6 # 6 # 6 # 6 # 6 # 6 # 6 # 6	5/10 5/12 5/14 5/16	Stage & Rainfa	me	26 5/28 5	6/1	6/3 6/5	0.00 0.25 0.50 0.75 1.00 1.25	
90 80 70 5/4 5/6 5/8	5/10 5/12 5/14 5/	16 5/18 5/20 5/2	22 5/24 !	5/26 5/28	5/30 6/1	6/3 6/5	6/7	
300 200 100 0 5/4 5/6 5/	8 5/10 5/12 5/14	Turbidity 5/16 5/18 5/20 5	//22 5/24	5/26 5/28	5/30 6/1	6/3 6/5	6/7	
7.6 7.2 7.2 7.0 6.8 6.6 6.4 5/4 5/6 5/8	5/10 5/12 5/14 5,	pH /16 5/18 5/20 5/	22 5/24	5/26 5/28	5/30 6/1	6/3 6/5	6/7	
		Specific Cond	uctivity					
0.20 0.15 0.00 0.05 0.00 5/4 5/6 5/8	5/10 5/12 5/14 5	5/16 5/18 5/20 5 <sub>1</sub>	/22 5/24	5/26 5/28	5/30 6/1	6/3 6/5	6/7	
SCDHEC in-stream star	ndard: Daily average not less than 5 mg/L v	vith a low of 4 mg/L Dissolved	Oxygen			4 mg/L (SCDHEC	Low Standard)	
5/4 5/6 5/8	5/10 5/12 5/14 5	/16 5/18 5/20 5/	/22 5/24	5/26 5/28	5/30 6/1	6/3 6/5	6/7	

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 (May 4, 2017 -- June 7, 2017)

## **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:

Analyto	Sample 1		Sample 2		Sample 3		Sample 4	
Analyte (units)								
	Time	Result	Time	Result	Time	Result	Time	Result
Escherichia coli								
(MPN/100mL)								
Total Suspended								
Solids (mg/L)								
Total Phosphorus (mg/L)								
Total Nitrogen (mg/L)								

Note: