Kinley Creek Monitoring Sites
Monitoring Data Summary for
February 15th, 2019 – March 19th, 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 March 14th-18th, 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 and KINB station recorded average DO concentrations of 9.3 mg/L, which is well above the SCDHEC daily average standard of 5 mg/L.
- The instantaneous minimum DO values recorded at the KINA and KINB stations were 7.3 mg/L and 6.8 mg/L, respectively, which are both above the SCDHEC instantaneous minimum standard of 4 mg/L.

Storm Events

- The rain gauge along Kinley Creek recorded 11 storm events during this deployment period that resulted in a total of 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 10.7 days in the Kinley Creek watershed, occurring after the storm event on March 9th until the end of the monitoring period.

Potential Illicit Discharges and Abnormal Events

- Abnormal activity was observed at both Kinley Creek monitoring stations on March 5th, occurring just before and during a storm event on this day. In response to this activity, turbidity and water temperature decreased, while pH, specific conductivity, and DO increased.
- At the KINA station, a potential illicit discharge was observed on March 13th which caused a notable increase in specific conductivity. The same impact to specific conductivity was also observed downstream at the SMIB station.
- At the KINB station, several periods of slightly elevated specific conductivity were observed on: February 24th and March 11th.

Flow Measurements

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

City of Columbia, SC Stormwater Management — Partnering for clean waterways

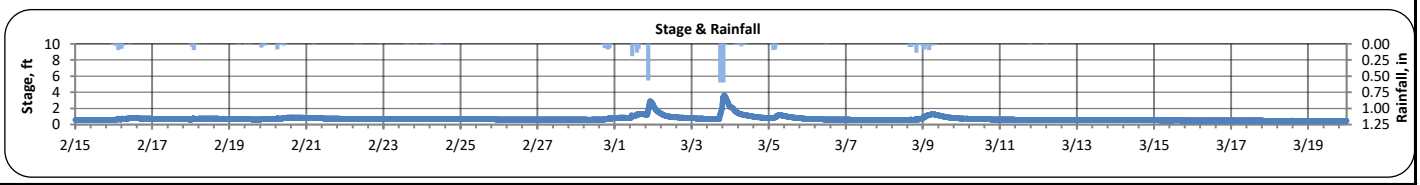
Continuous Water Quality Monitoring Periodic Report

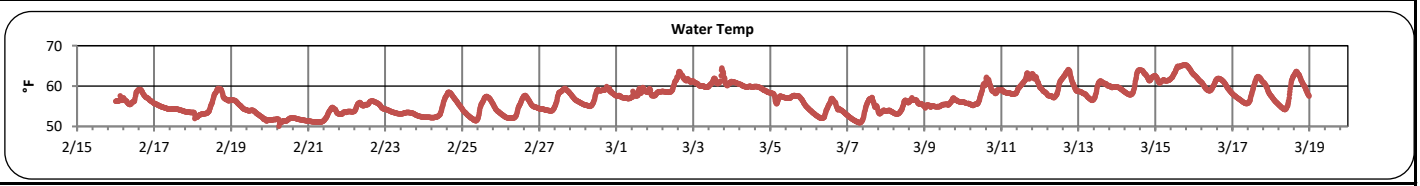
WOOLPERT

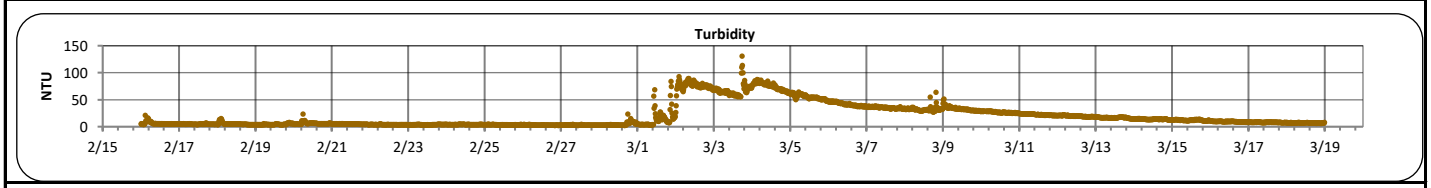
Kinley Creek A (February 15, 2019 -- March 19, 2019)

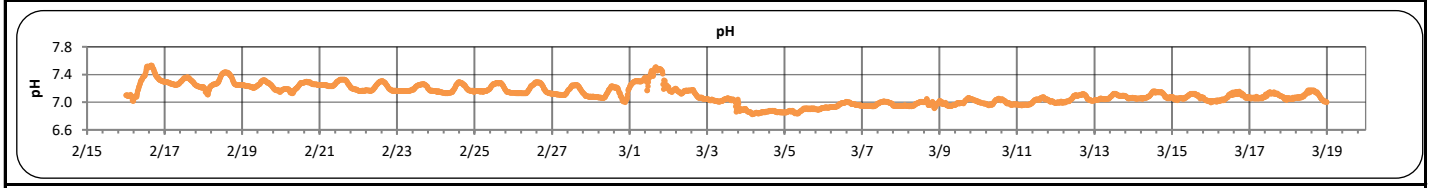
PARAMETER	DESCRIPTION
STREAM NAME:	Kinley Creek
LOCATION:	Longhorn Steakhouse
ADDRESS:	171 Harbison Blvd Columbia, SC 29212
COORDINATES:	34.069897, -81.164592
TMDL/IMPAIRMENT:	Fecal Coliform
NEIGHBORING LANDUSE:	Residential and commercial
SPATIAL LOCATION:	Most upstream site
TOTAL NO. STORMS OVER 0.1 INCH:	11
MAX. DAILY RAINFALL:	1.7 inches
TOTAL RAINFALL (FOR PERIOD):	5.0 inches

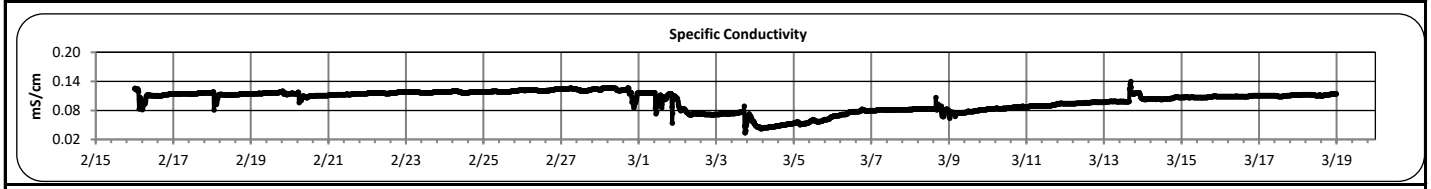
CONTINUOUS WATER QUALITY PARAMETERS:	SUMMARY STATISTICS				
	MINIMUM OBSERVED	MAXIMUM OBSERVED	MEDIAN OBSERVED	MEAN OBSERVED	STANDARD DEVIATION
STAGE (FT):	0.5	3.6	0.7	0.7	0.3
TEMPERATURE (°F):	50	65	57	57	3
TURBIDITY (NTU):	3	131	9	20	22
pH:	6.8	7.5	7.1	7.1	0.1
SPECIFIC CONDUCTIVITY (mS/cm):	0.034	0.14	0.109	0.100	0.021
DISSOLVED OXYGEN (mg/L):	7.3	10.7	9.4	9.3	0.6

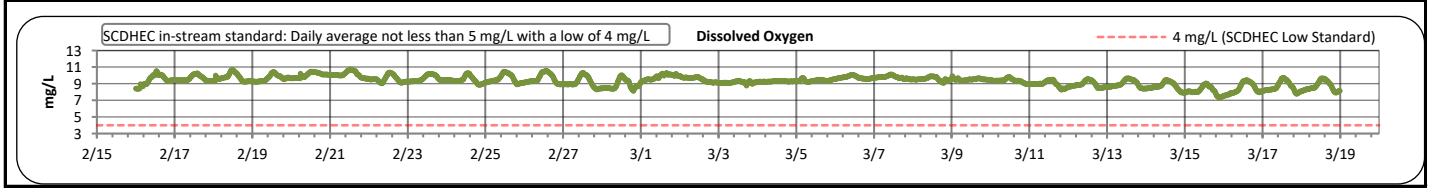












Note: Data gaps appear when the sonde is removed for calibration or when the flow depth is below the sensors

REPORT GENERATED ON 4/15/2019

Continuous Water Quality
Monitoring Periodic Report

Kinley Creek A (February 15, 2019 -- March 19, 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	
	3/1/2019		3/1/2019					
	Time	Result	Time	Result	Time	Result	Time	Result
Escherichia coli (MPN/100mL)	10:50	11590	12:03	1056				
Total Suspended Solids (mg/L)	10:50	63	12:03	12.9				
Total Phosphorus (mg/L)	10:50	0.088	12:03	0.075				
Total Nitrogen (mg/L)	10:50	1.31	12:03	1.01				

Note:

REPORT GENERATED ON 4/15/2019

City of Columbia, SC Stormwater Management — Partnering for clean waterways

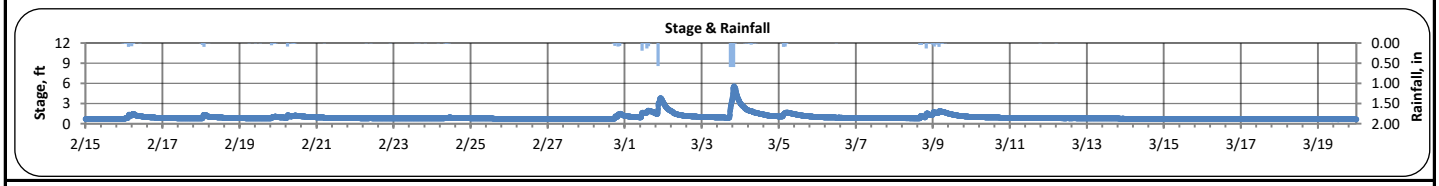
Continuous Water Quality Monitoring Periodic Report

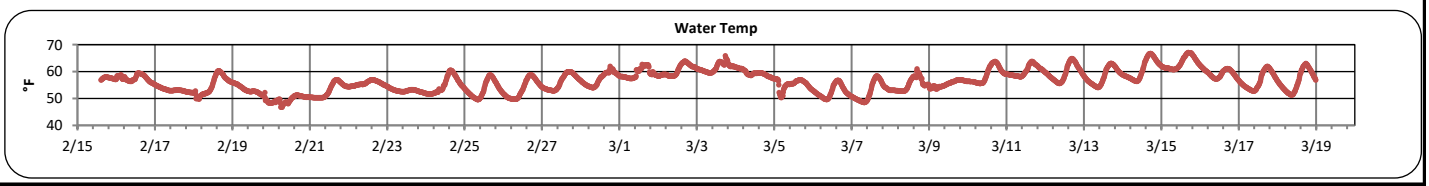
WOOLPERT

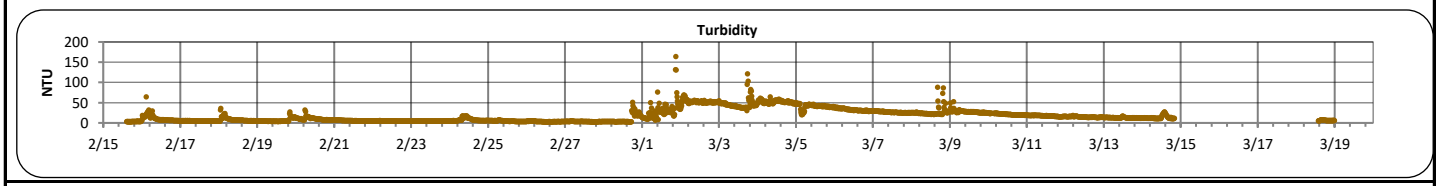
Kinley Creek B (February 15, 2019 -- March 19, 2019)

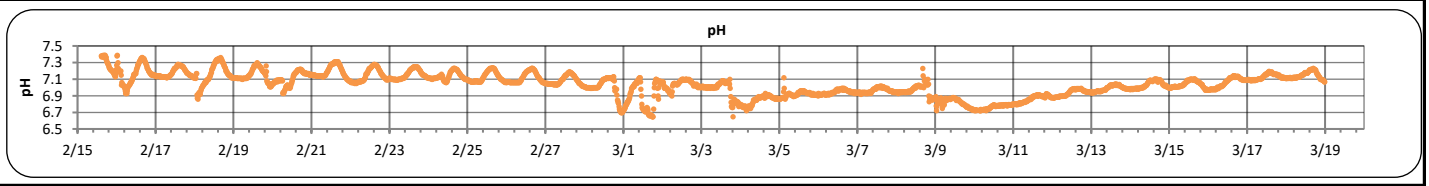
PARAMETER	DESCRIPTION
STREAM NAME:	Kinley Creek
LOCATION:	Broken Hill Rd
ADDRESS:	609 Broken Hill Rd Columbia, SC 29212
COORDINATES:	34.06635, -81.159986
TMDL/IMPAIRMENT:	Fecal Coliform
NEIGHBORING LANDUSE:	Residential and commercial
SPATIAL LOCATION:	Most downstream site
TOTAL NO. STORMS OVER 0.1 INCH:	11
MAX. DAILY RAINFALL:	1.7 inches
TOTAL RAINFALL (FOR PERIOD):	5.0 inches

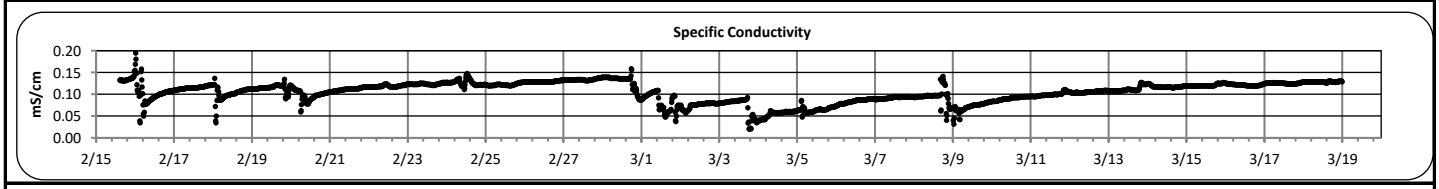
CONTINUOUS WATER QUALITY PARAMETERS:	SUMMARY STATISTICS				
	MINIMUM OBSERVED	MAXIMUM OBSERVED	MEDIAN OBSERVED	MEAN OBSERVED	STANDARD DEVIATION
STAGE (FT):	0.7	5.6	0.8	1.0	0.4
TEMPERATURE (°F):	47	67	57	57	4
TURBIDITY (NTU):	3	164	13	18	17
pH:	6.7	7.4	7.1	7.0	0.1
SPECIFIC CONDUCTIVITY (mS/cm):	0.021	0.195	0.111	0.105	0.023
DISSOLVED OXYGEN (mg/L):	6.8	11.6	9.2	9.3	0.8

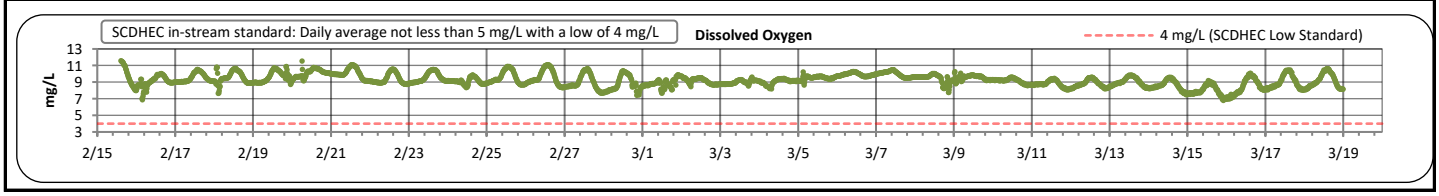












Note: Data gaps appear when the sonde is removed for calibration or when the flow depth is below the sensors

REPORT GENERATED ON 4/15/2019

Continuous Water Quality
Monitoring Periodic Report

Kinley Creek B (February 15, 2019 -- March 19, 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	
	3/1/2019		3/1/2019					
	Time	Result	Time	Result	Time	Result	Time	Result
Escherichia coli (MPN/100mL)	11:06	3232	12:57	4718				
Total Suspended Solids (mg/L)	11:06	43.7	12:57	20.5				
Total Phosphorus (mg/L)	11:06	0.095	12:57	0.069				
Total Nitrogen (mg/L)	11:06	0.86	12:57	0.82				

Note:

REPORT GENERATED ON 4/15/2019