

Kinley Creek Monitoring Sites

Monitoring Data Summary for February 15th, 2018 – March 27th, 2018

Data Gaps

- The KINA station did not experience any data gaps during this deployment period.
- The KINB station experienced some turbidity fouling after the storm events on March 1st and 21st. These short periods of data were removed from the dataset.

SCDHEC Standards

- Neither of the Kinley Creek monitoring stations recorded pH readings outside of the SCDHEC acceptable range of 6 to 8.5.
- KINA and KINB stations recorded average DO concentrations of 8.5 mg/L and 8.0 mg/L, respectively, well above the SCDHEC daily average standard of 5 mg/L.
- The instantaneous minimum DO values recorded at the KINA and KINB stations were 6.4 mg/L and 5.6 mg/L, respectively. These values are above the SCDHEC instantaneous minimum standard of 4.0 mg/L.

Storm Events

- The rain gauge along Kinley Creek recorded 8 storm events over this deployment period that resulted in 3.5 inches of precipitation.
- Both KINA and KINB stations 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 13.6 days in the Kinley Creek watershed occurring prior to the storm event on February 25th.

Potential Illicit Discharges and Abnormal Events

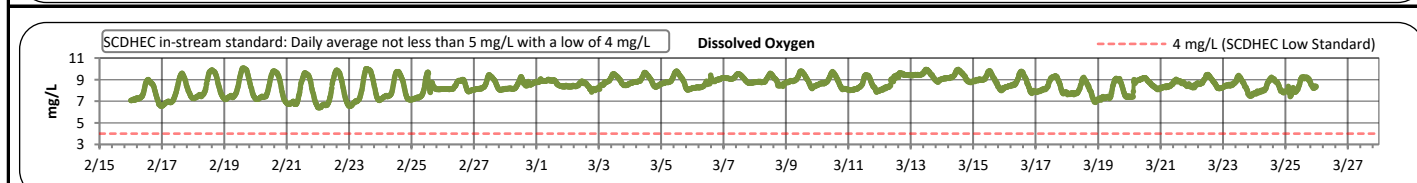
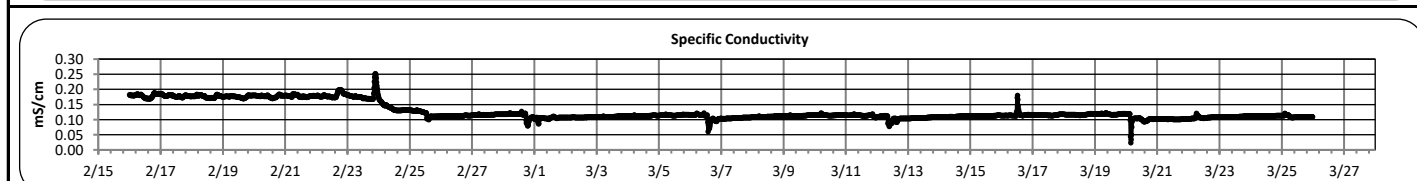
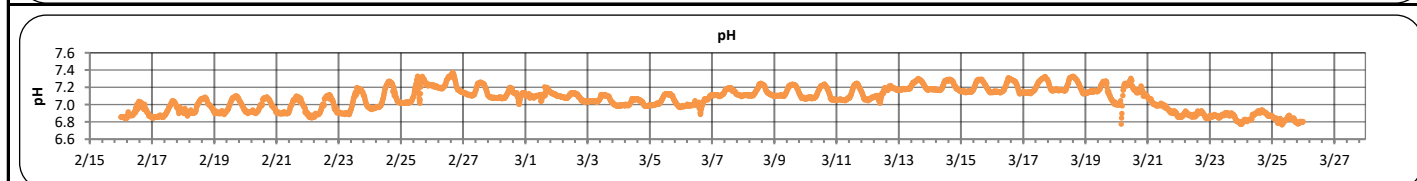
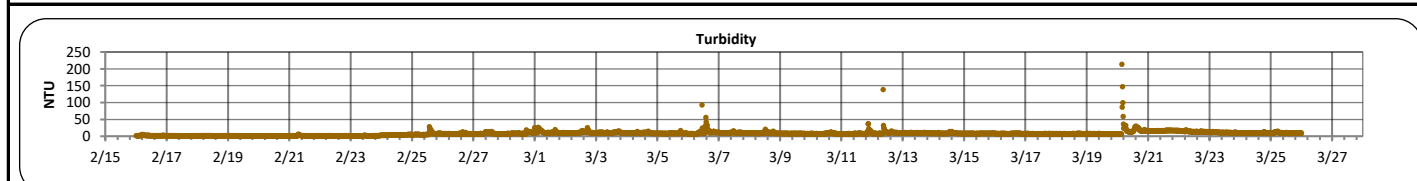
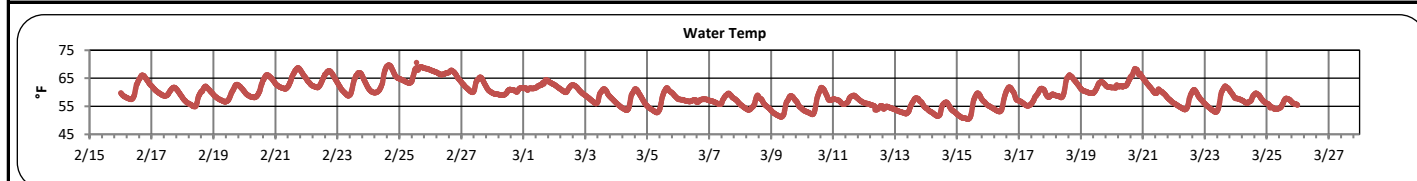
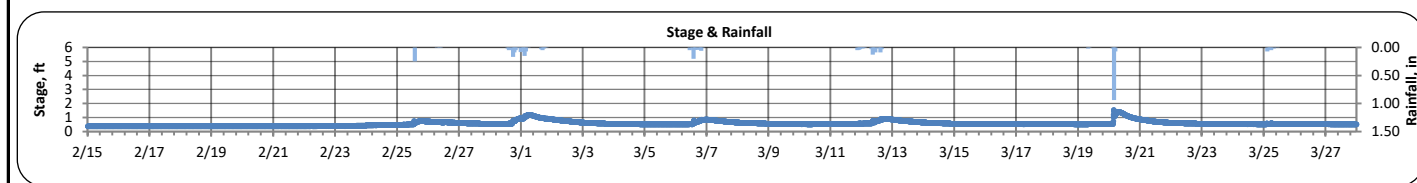
- Specific conductivity was slightly elevated at both Kinley Creek stations from the beginning of this deployment period to February 24th. This period of higher specific conductivity is most likely from the discharge of the upstream control structure being reduced, noticed from the Campbell Scientific pressure transducer data.
- At KINB on February 21st, a potential illicit discharge was observed in the turbidity data. Turbidity reached 200 NTUs during this period.

Flow Measurements

- There were not any flow measurements taken at the Kinley Creek stations during this deployment period.

Kinley Creek A (February 15, 2018 -- March 27, 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):	0.4	1.5	0.5	0.6	0.2
LOCATION:	Longhorn Steakhouse	TEMPERATURE (°F):	50	71	59	59	4
ADDRESS:	171 Harbison Blvd Columbia, SC 29212	TURBIDITY (NTU):	1	214	9	9	7
COORDINATES:	34.069897, -81.164592	pH:	6.8	7.4	7.1	7.1	0.1
TMDL/IMPAIRMENT:	Fecal Coliform	SPECIFIC CONDUCTIVITY (mS/cm):	0.024	0.252	0.114	0.126	0.029
NEIGHBORING LANDUSE:	Residential and commercial	DISSOLVED OXYGEN (mg/L):	6.4	10.1	8.6	8.5	0.8
SPATIAL LOCATION:	Most upstream site						
TOTAL NO. STORMS OVER 0.1 INCH:	8						
MAX. DAILY RAINFALL:	1.0 inches						
TOTAL RAINFALL (FOR PERIOD):	3.5 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 (February 15, 2018 -- March 27, 2018)

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.

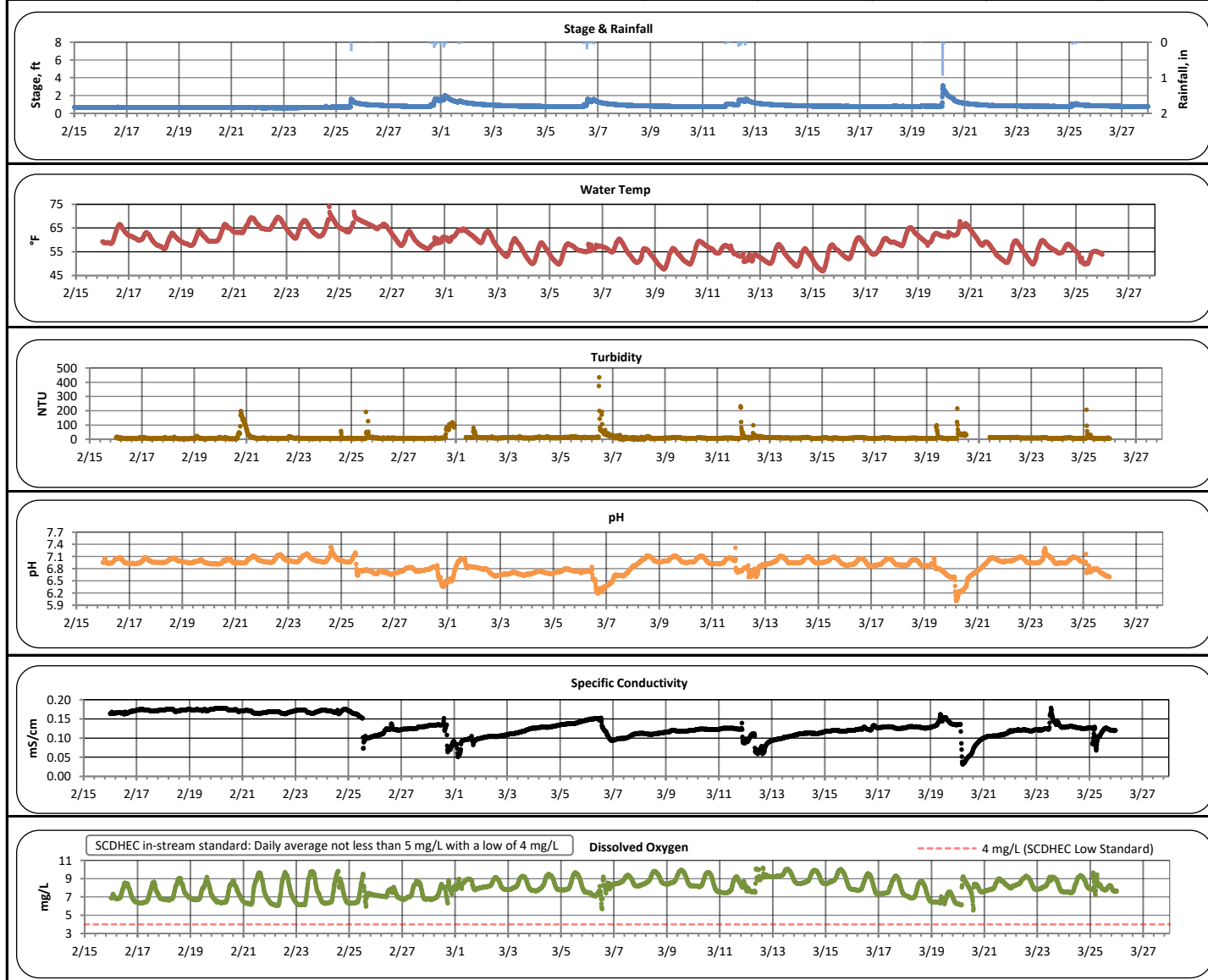
Grab Sample Data:

Analyte (units)	Sample 1		Sample 2		Sample 3		Sample 4	
	2/26/2018							
	Time	Result	Time	Result	Time	Result	Time	Result
<i>Escherichia coli</i> (MPN/100mL)	10:55	406						
Total Suspended Solids (mg/L)								
Total Phosphorus (mg/L)								
Total Nitrogen (mg/L)								

Note: One sample was collected at this site at the start of rain event, however, the rain event produced less rain than expected so further samples were not collected.

Kinley Creek B (February 15, 2018 -- March 27, 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):	0.6	3.2	0.8	0.9	0.2
LOCATION:	Broken Hill Rd	TEMPERATURE (°F):	47	74	58	59	5
ADDRESS:	609 Broken Hill Rd Columbia, SC 29212	TURBIDITY (NTU):	1	435	10	13	20
COORDINATES:	34.06635, -81.159986	pH:	6.0	7.4	6.9	6.9	0.2
TMDL/IMPAIEMENT:	Fecal Coliform	SPECIFIC CONDUCTIVITY (mS/cm):	0.032	0.179	0.125	0.130	0.028
NEIGHBORING LANDUSE:	Residential and commercial	DISSOLVED OXYGEN (mg/L):	5.6	10.2	8.1	8.0	1.0
SPATIAL LOCATION:	Most downstream site						
TOTAL NO. STORMS OVER 0.1 INCH:	8						
MAX. DAILY RAINFALL:	1.0 inches						
TOTAL RAINFALL (FOR PERIOD):	3.5 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 (February 15, 2018 -- March 27, 2018)

Explanation of Statistics:

MINIMUM OBSERVED	The minimum of the values recorded by the datasonde in 15 minute intervals.
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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	
	2/26/2018							
	Time	Result	Time	Result	Time	Result	Time	Result
<i>Escherichia coli</i> (MPN/100mL)	11:10	1,040						
Total Suspended Solids (mg/L)								
Total Phosphorus (mg/L)								
Total Nitrogen (mg/L)								

Note: One sample was collected at this site at the start of rain event, however, the rain event produced less rain than expected so further samples were not collected.