

Kinley Creek Monitoring Sites

Monitoring Data Summary for March 21st, 2019 – April 24th, 2019

Data Gaps

- At the KINA station, the DO data was noisy from March 25th-27th due to pollen buildup and was removed from the dataset.
- The KINB station experienced a brief period of fouling turbidity on April 1st and from April 21st to the 24th when the sonde was retrieved for calibrations. These periods were deleted 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 7.8 mg/L and 7.7 mg/L, respectively, which are both well above the SCDHEC daily average standard of 5 mg/L.
- The instantaneous minimum DO values recorded at the KINA and KINB stations were 5.2 mg/L and 4.7 mg/L, respectively, which are both above the SCDHEC instantaneous minimum DO standard of 4 mg/L.

Storm Events

- The rain gauge along Kinley Creek recorded 10 storm events during this deployment period that resulted in a total of 3.7 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 16.6 days in the Kinley Creek watershed, occurring prior to the storm event on March 25th.

Potential Illicit Discharges and Abnormal Events

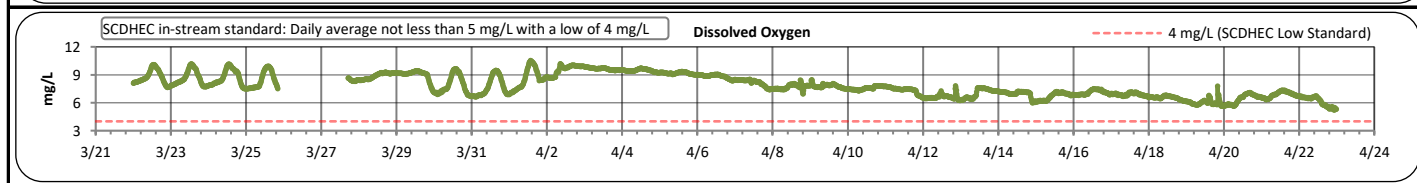
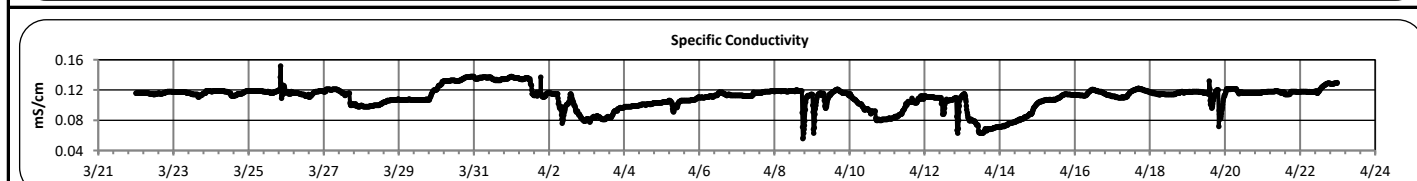
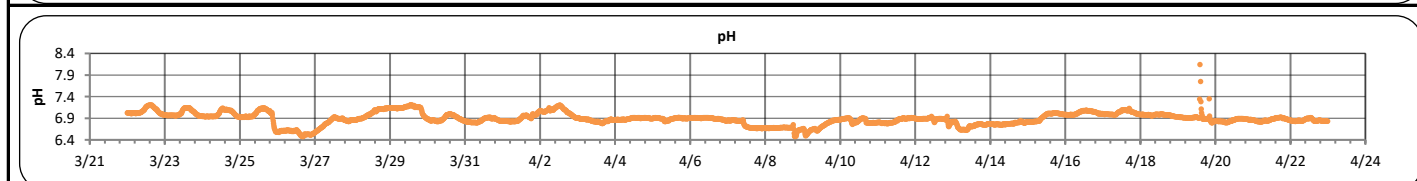
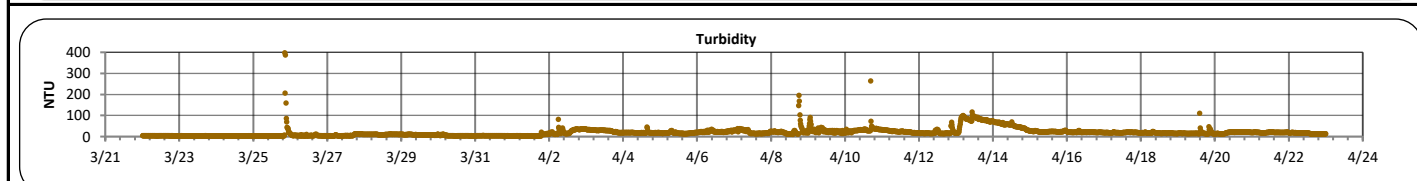
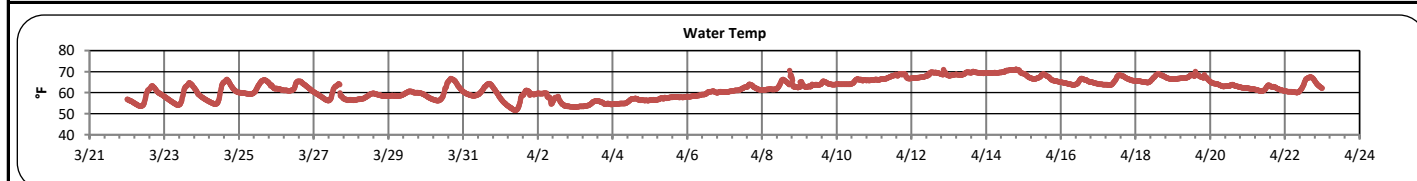
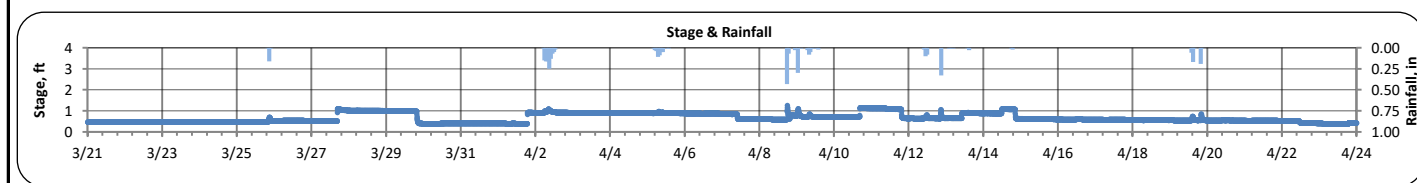
- There were several instances at both KINA and KINB when the stage experienced abrupt increases and decreases, likely caused by activity at Lake Quail Valley upstream of the KINA station. These periods caused some impacts to water quality.

Flow Measurements

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

Kinley Creek A (March 21, 2019 -- April 24, 2019)

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	1.3	0.6	0.7	0.2
LOCATION:	Longhorn Steakhouse	TEMPERATURE (°F):	52	71	62	62	5
ADDRESS:	171 Harbison Blvd Columbia, SC 29212	TURBIDITY (NTU):	3	398	18	20	21
COORDINATES:	34.069897, -81.164592	pH:	6.5	8.2	6.9	6.9	0.1
TMDL/IMPAIRMENT:	Fecal Coliform	SPECIFIC CONDUCTIVITY (mS/cm):	0.056	0.152	0.114	0.110	0.015
NEIGHBORING LANDUSE:	Residential and commercial	DISSOLVED OXYGEN (mg/L):	5.2	10.5	7.6	7.8	1.2
SPATIAL LOCATION:	Most upstream site						
TOTAL NO. STORMS OVER 0.1 INCH:	10						
MAX. DAILY RAINFALL:	1.0 inches						
TOTAL RAINFALL (FOR PERIOD):	3.7 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 (March 21, 2019 -- April 24, 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.

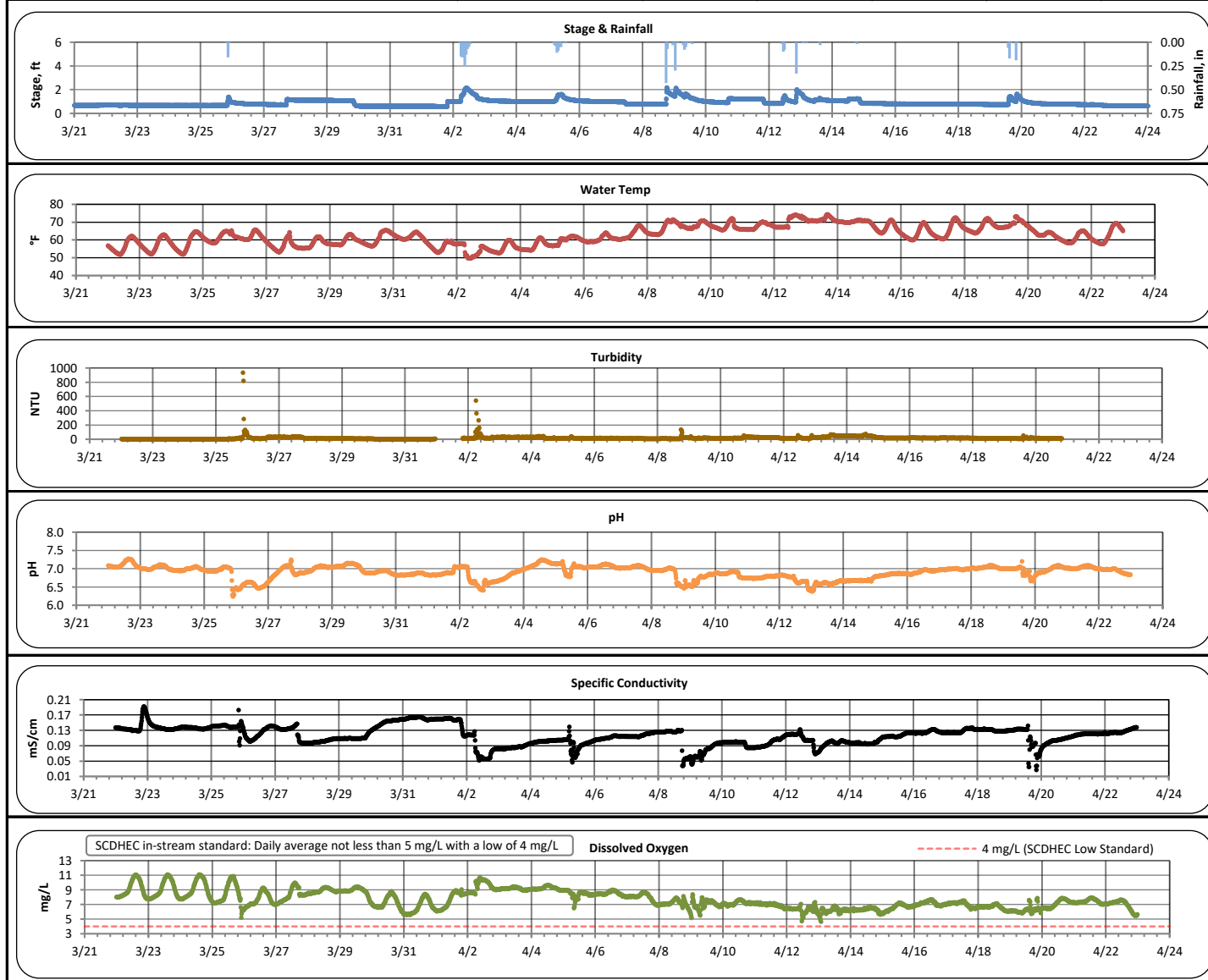
Grab Sample Data:

Analyte (units)	Sample 1		Sample 2		Sample 3		Sample 4	
	3/21/2019		4/18/2019					
	Time	Result	Time	Result	Time	Result	Time	Result
<i>Escherichia coli</i> (MPN/100mL)	11:35	40	12:05	718				
Total Suspended Solids (mg/L)								
Total Phosphorus (mg/L)								
Total Nitrogen (mg/L)								

Note: Each sample was collected during dry weather conditions.

Kinley Creek B (March 21, 2019 -- April 24, 2019)

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	2.2	0.8	0.9	0.3
LOCATION:	Broken Hill Rd	TEMPERATURE (°F):	50	74	62	63	6
ADDRESS:	609 Broken Hill Rd Columbia, SC 29212	TURBIDITY (NTU):	3	936	15	20	31
COORDINATES:	34.06635, -81.159986	pH:	6.3	7.3	7.0	6.9	0.2
TMDL/IMPAIRMENT:	Fecal Coliform	SPECIFIC CONDUCTIVITY (mS/cm):	0.027	0.192	0.118	0.116	0.024
NEIGHBORING LANDUSE:	Residential and commercial	DISSOLVED OXYGEN (mg/L):	4.7	11.1	7.4	7.7	1.2
SPATIAL LOCATION:	Most downstream site						
TOTAL NO. STORMS OVER 0.1 INCH:	10						
MAX. DAILY RAINFALL:	1.0 inches						
TOTAL RAINFALL (FOR PERIOD):	3.7 inches						



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**Continuous Water Quality
Monitoring Periodic Report**

Kinley Creek B (March 21, 2019 -- April 24, 2019)

Explanation of Statistics:

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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	
	3/21/2019		4/18/2019					
	Time	Result	Time	Result	Time	Result	Time	Result
<i>Escherichia coli</i> (MPN/100mL)	10:59	804	12:26	242				
Total Suspended Solids (mg/L)								
Total Phosphorus (mg/L)								
Total Nitrogen (mg/L)								

Note: Each sample was collected during dry weather conditions.