Kinley Creek Monitoring Sites
Monitoring Data Summary for
June 19th, 2019 – July 25th, 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 July 13th-15th. This period of turbidity data was deleted.

SCDHEC Standards

- The KINA station did not record pH readings outside the SCDHEC acceptable range of 6 to 8.5. The KINB station recorded a maximum pH value of 9.1, which is outside of the acceptable pH range. These high values occurred during the storm event on July 23rd.
- The KINA station recorded an average DO concentration of 4.3 mg/L, which is lower than the SCDHEC daily average standard of 5 mg/L. The KINB station recorded an average DO concentration of 5.4 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 1.0 mg/L and 3.7 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 10 storm events during this deployment period that resulted in a total of 5.1 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 14 days in the Kinley Creek watershed, occurring prior to the storm event on July 8th.

Potential Illicit Discharges and Abnormal Events

- Abnormally high pH readings were recorded on July 23rd at the KINB monitoring station.

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

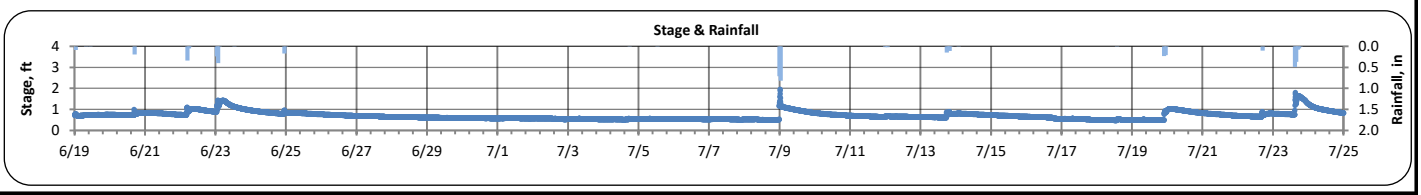
Continuous Water Quality Monitoring Periodic Report

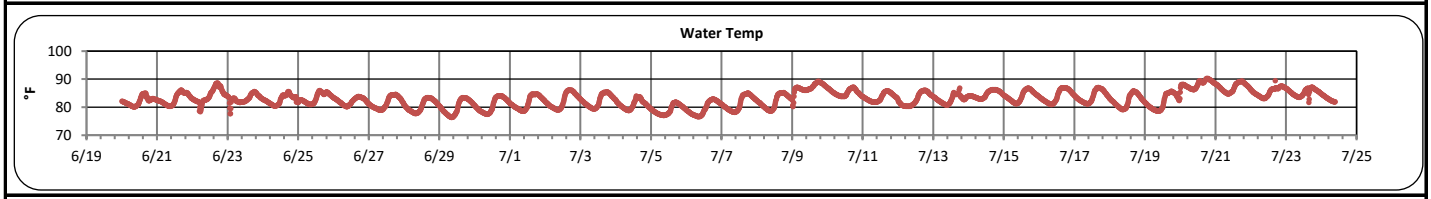
WOOLPERT

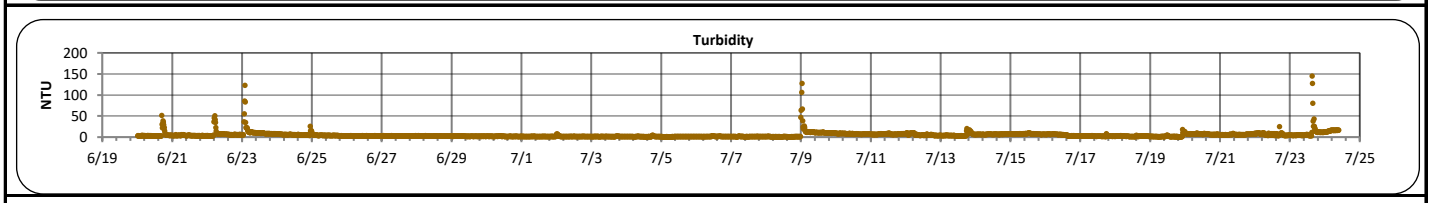
Kinley Creek A (June 19, 2019 -- July 25, 2019)

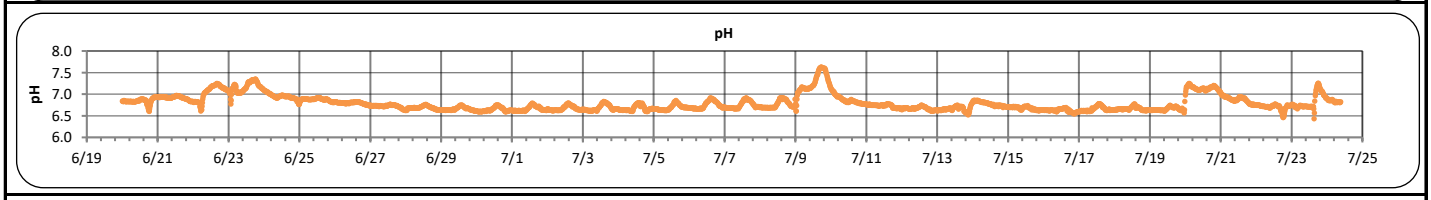
PARAMETER	DESCRIPTION
STREAM NAME:	Kinley Creek
LOCATION:	Longhorn Steakhouse
ADDRESS:	171 Harbison Blvd Columbia, SC 29212
COORDINATES:	34.069897, -81.164592
TMDL/IMPAIRMENT:	Fecal Coliform
NEIGHBORING LANDUSE:	Residential and commercial
SPATIAL LOCATION:	Most upstream site
TOTAL NO. STORMS OVER 0.1 INCH:	10
MAX. DAILY RAINFALL:	1.0 inches
TOTAL RAINFALL (FOR PERIOD):	5.1 inches

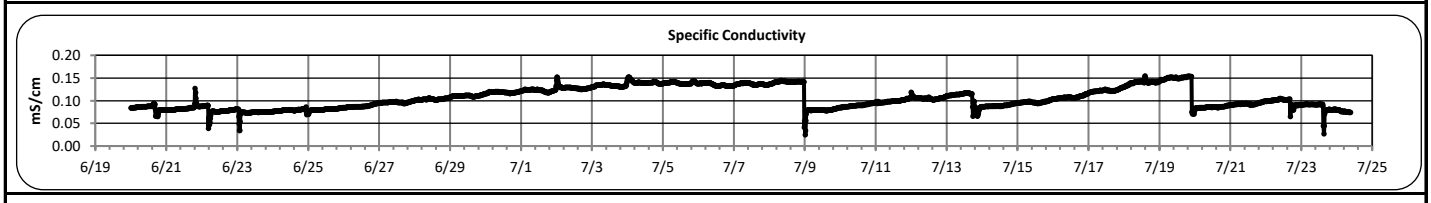
CONTINUOUS WATER QUALITY PARAMETERS:	SUMMARY STATISTICS				
	MINIMUM OBSERVED	MAXIMUM OBSERVED	MEDIAN OBSERVED	MEAN OBSERVED	STANDARD DEVIATION
STAGE (FT):	0.5	2.0	0.7	0.7	0.2
TEMPERATURE (°F):	76	90	83	83	3
TURBIDITY (NTU):	1	145	4	5	7
pH:	6.4	7.6	6.7	6.8	0.2
SPECIFIC CONDUCTIVITY (mS/cm):	0.025	0.155	0.102	0.106	0.023
DISSOLVED OXYGEN (mg/L):	1.0	8.0	4.1	4.3	1.4

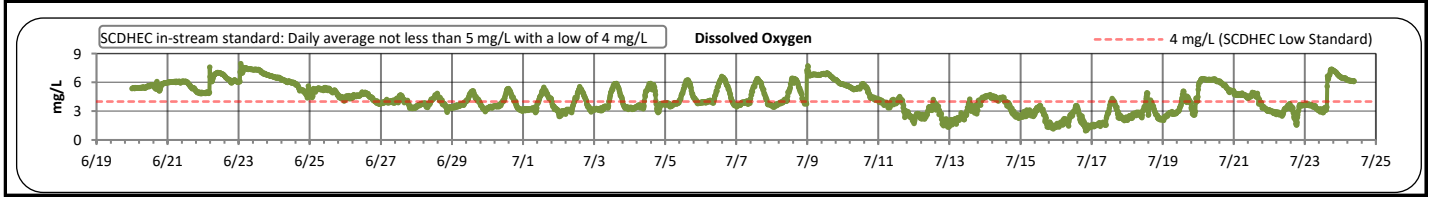












Note: Data gaps appear when the sonde is removed for calibration or when the flow depth is below the sensors

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Continuous Water Quality
Monitoring Periodic Report

Kinley Creek A (June 19, 2019 -- July 25, 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	
	7/17/2019		7/23/2019		7/23/2019		7/23/2019	
	Time	Result	Time	Result	Time	Result	Time	Result
Escherichia coli (MPN/100mL)	8:46	1920	16:23	25990	15:50	1248	16:23	2592
Total Suspended Solids (mg/L)			16:23	165	15:50	54	16:23	48
Total Phosphorus (mg/L)			16:23	0.23	15:50	0.12	16:23	0.11
Total Nitrogen (mg/L)			16:23	1.57	15:50	1.62	16:23	1.57

Note: Sample 1 was collected during dry weather conditions. Samples 2-4 were collected during wet weather conditions.

City of Columbia, SC Stormwater Management
Partnering for clean waterways

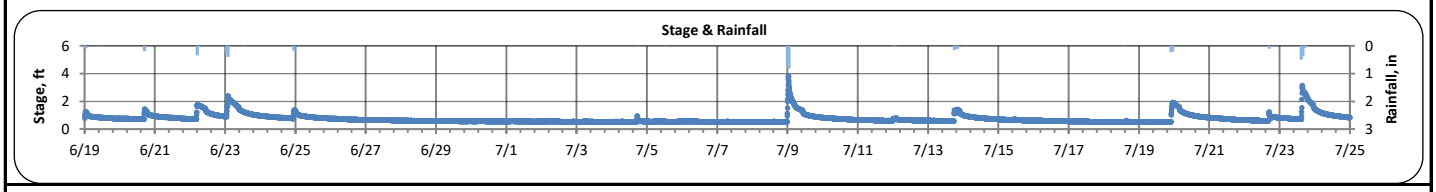
Continuous Water Quality Monitoring Periodic Report

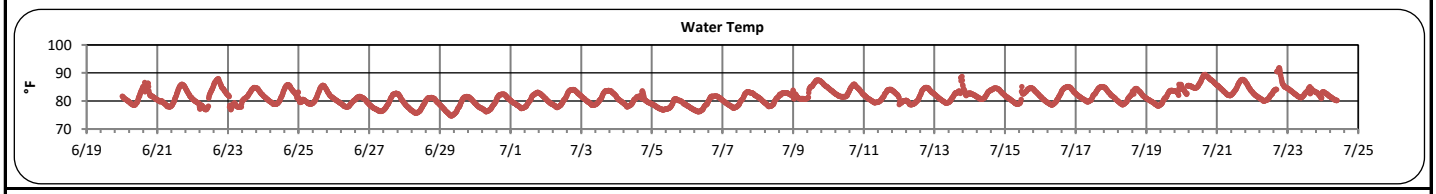
WOOLPERT

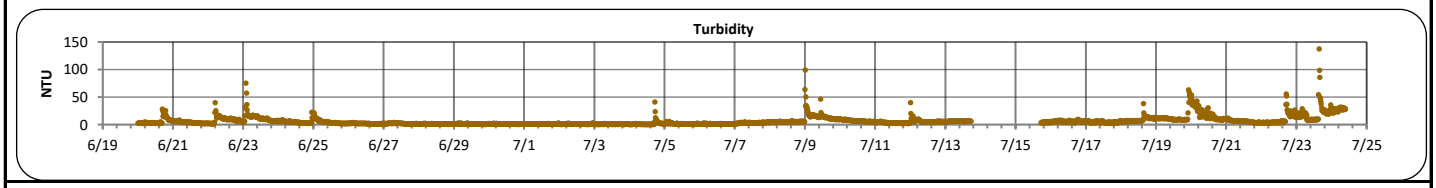
Kinley Creek B (June 19, 2019 -- July 25, 2019)

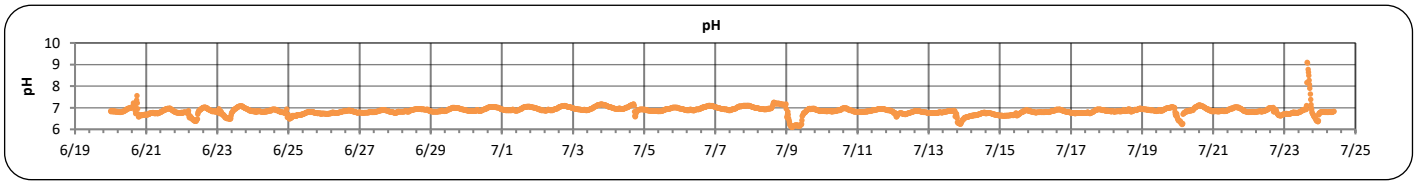
PARAMETER	DESCRIPTION
STREAM NAME:	Kinley Creek
LOCATION:	Broken Hill Rd
ADDRESS:	609 Broken Hill Rd Columbia, SC 29212
COORDINATES:	34.06635, -81.159986
TMDL/IMPAIRMENT:	Fecal Coliform
NEIGHBORING LANDUSE:	Residential and commercial
SPATIAL LOCATION:	Most downstream site
TOTAL NO. STORMS OVER 0.1 INCH:	10
MAX. DAILY RAINFALL:	1.0 inches
TOTAL RAINFALL (FOR PERIOD):	5.1 inches

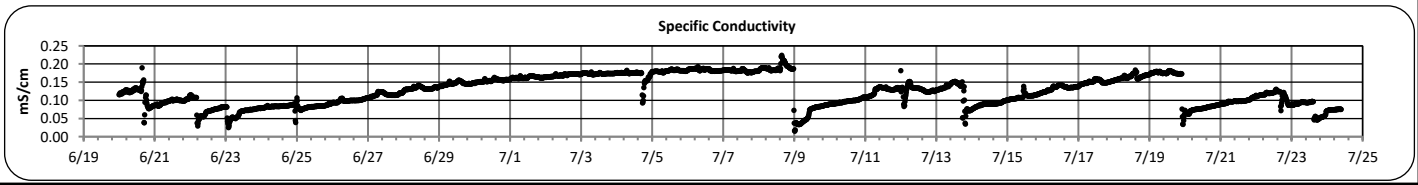
CONTINUOUS WATER QUALITY PARAMETERS:	SUMMARY STATISTICS				
	MINIMUM OBSERVED	MAXIMUM OBSERVED	MEDIAN OBSERVED	MEAN OBSERVED	STANDARD DEVIATION
STAGE (FT):	0.5	3.9	0.6	0.8	0.3
TEMPERATURE (°F):	75	92	81	81	3
TURBIDITY (NTU):	1	138	4	6	8
pH:	6.1	9.1	6.9	6.9	0.2
SPECIFIC CONDUCTIVITY (mS/cm):	0.015	0.224	0.127	0.126	0.040
DISSOLVED OXYGEN (mg/L):	3.7	8.5	5.4	5.4	0.8

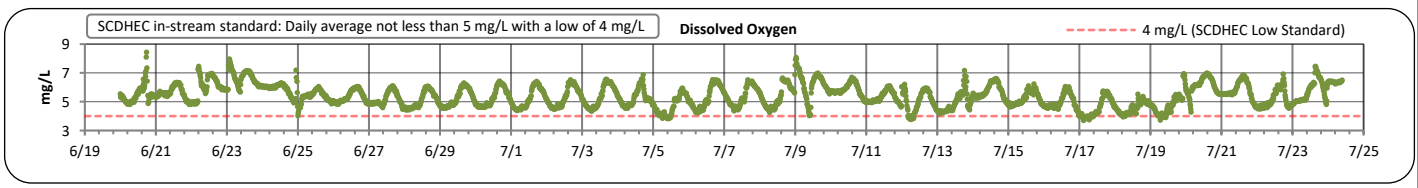












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Continuous Water Quality
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Sampled Data:

Analyte (units)	Sample 1		Sample 2		Sample 3		Sample 4	
	7/17/2019		7/23/2019		7/23/2019		7/23/2019	
	Time	Result	Time	Result	Time	Result	Time	Result
Escherichia coli (MPN/100mL)	8:06	736	15:38	1434	16:08	3870	16:50	5510
Total Suspended Solids (mg/L)			15:38	90.5	16:08	44	16:50	37.4
Total Phosphorus (mg/L)			15:38	0.12	16:08	0.1	16:50	0.11
Total Nitrogen (mg/L)			15:38	0.98	16:08	1.29	16:50	1.17

Note: Sample 1 was collected during dry weather conditions. Samples 2-4 were collected during wet weather conditions.