

Kinley Creek Monitoring Sites

August 26, 2014

Monitoring Data Analysis for July 7, 2014 – August 12, 2014

SCDHEC Standards

- The average DO at KINA and KINB was above the 5 mg/L daily average limit, with values of 5.5 mg/L and 5.8 mg/L, respectively.
- Both sites did record instantaneous DO levels below the 4 mg/L instantaneous limit. At KINA, low DO values were recorded on most nights, when no photosynthesis is occurring in the stream but aquatic species are still respiring. The large diel fluctuations in DO are an indication of significant periphyton activity at this site. At KINB, DO values below 4 mg/L were recorded in the hours or days following most of the storm events recorded during this monitoring period. This could be a result of the detention pond behind Dicks Sporting Goods which discharges just upstream of the KINB station.
- The pH standards were not surpassed at either station during this deployment.

Storm Events

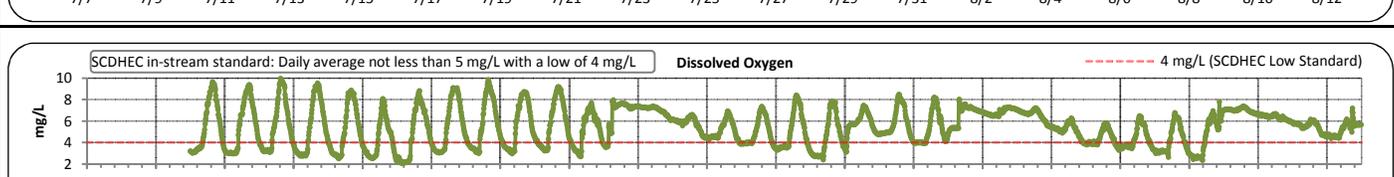
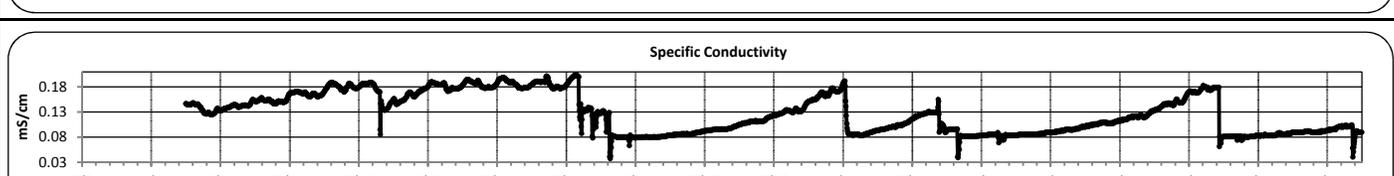
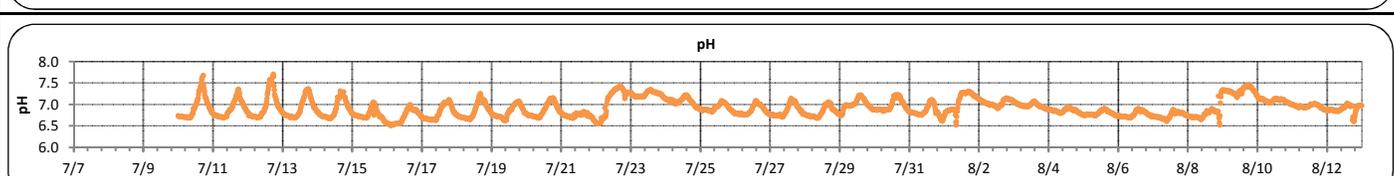
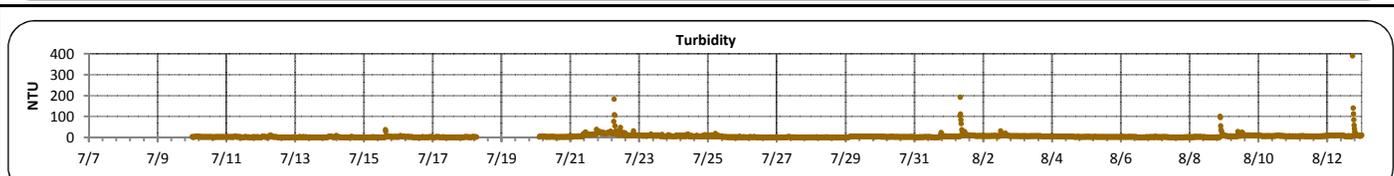
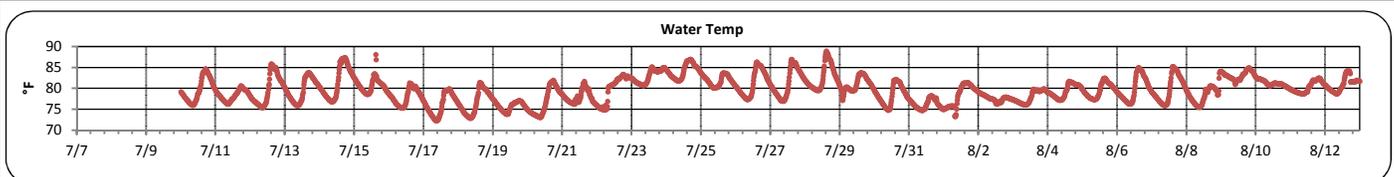
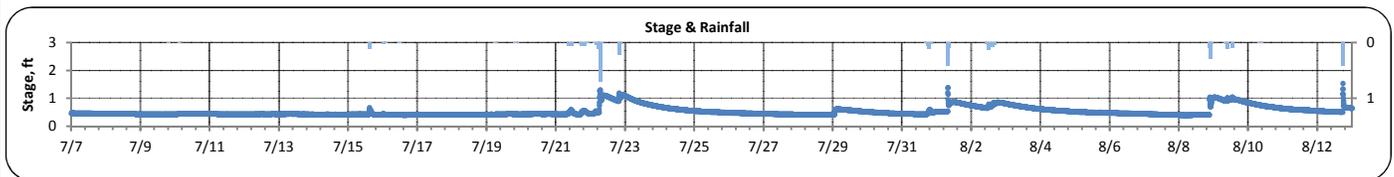
- The KIN rain gage recorded 11 storm events during this deployment period.
- Most of the recorded events were fairly small, with only 3.9 inches total recorded.

Potential Illicit Discharges

- Only one minor potential illicit was recorded at KINA during this deployment period. On July 20th there was a slight increase in specific conductivity, but no other parameters were influenced.
- At KINB, several potential illicit discharge events were noted:
- The regularly observed small morning increase in specific conductivity up to 0.01 mS/cm was noted on July 10th, 17th, 24th-28th, as well as August 4th-7th.
- Additional potential illicit events were relative minor, but were noted on July 12th, 14th, 20th, and 25th.

Kinley Creek A (July 7, 2014 -- Aug 12, 2014)

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	0.4	0.5	0.2
LOCATION:	Longhorn Steakhouse	TEMPERATURE (°F):	72	89	80	80	3
ADDRESS:	171 Harbison Blvd Columbia, SC 29212	TURBIDITY (NTU):	1	390	3	5	11
COORDINATES:	34.069897, -81.164592	pH:	6.5	7.7	6.9	6.9	0.2
TMDL/IMPAIRMENT:	Fecal Coliform	SPECIFIC CONDUCTIVITY (mS/cm):	0.037	0.204	0.122	0.127	0.039
NEIGHBORING LANDUSE:	Residential and commercial	DISSOLVED OXYGEN (mg/L):	2.1	10.0	5.6	5.5	1.7
SPATIAL LOCATION:	Most upstream site						
TOTAL NO. STORMS OVER 0.1 INCH:	11						
MAX. DAILY RAINFALL:	1.1 inches						
TOTAL RAINFALL (FOR PERIOD):	3.9 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 (July 7, 2014 -- Aug 12, 2014)

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.

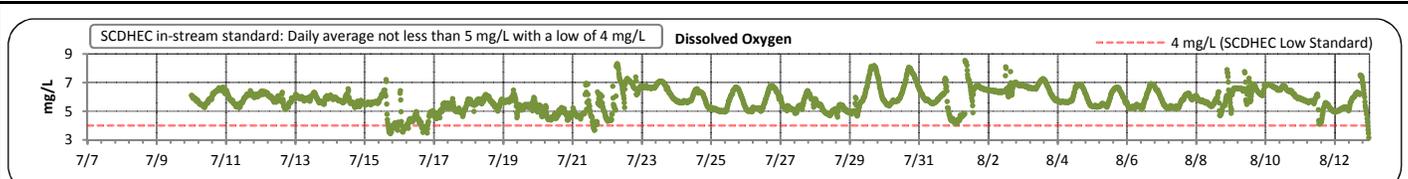
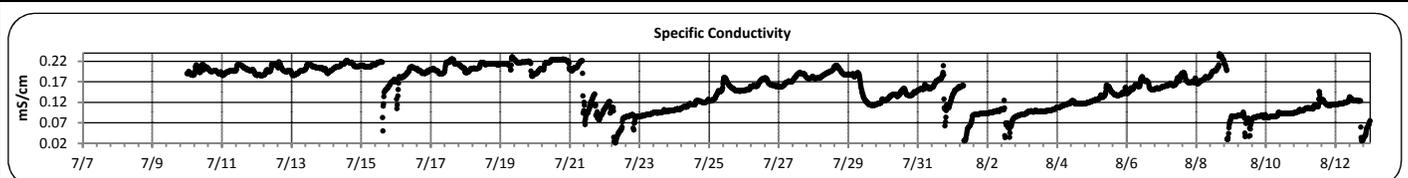
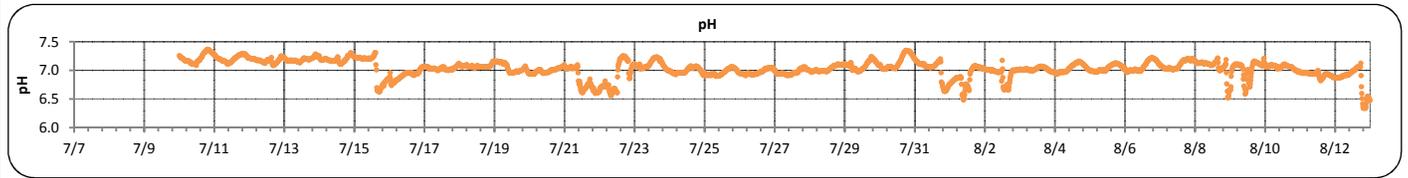
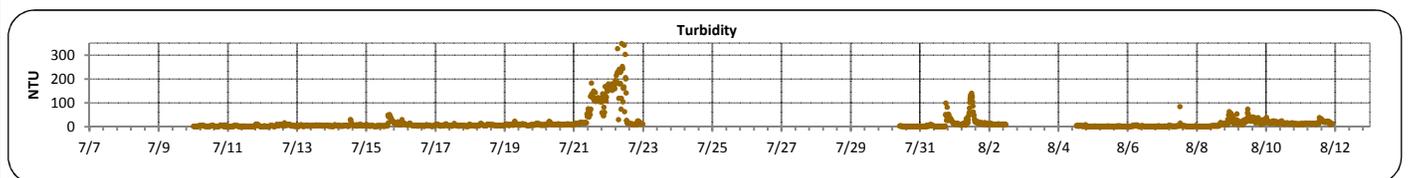
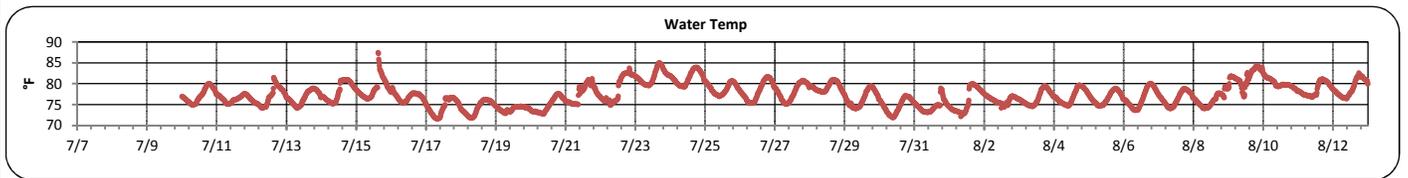
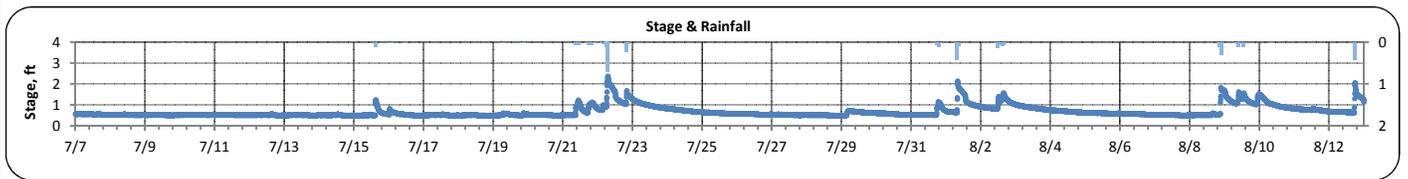
Grab Sample Data:

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

Note:

Kinley Creek B (July 7, 2014 -- Aug 12, 2014)

PARAMETER	DESCRIPTION	CONTINUOUS WATER QUALITY PARAMETERS:	SUMMARY STATISTICS				
			MINIMUM OBSERVED	MAXIMUM OBSERVED	MEDIAN OBSERVED	MEAN OBSERVED	STANDARD DEVIATION
STREAM NAME:	Kinley Creek	STAGE (FT):	0.5	2.4	0.6	0.7	0.3
LOCATION:	Broken Hill Rd	TEMPERATURE (°F):	72	87	77	77	3
ADDRESS:	609 Broken Hill Rd Columbia, SC 29212	TURBIDITY (NTU):	1	348	7	16	34
COORDINATES:	34.06635, -81.159986	pH:	6.3	7.4	7.1	7.0	0.1
TMDL/IMPAIRMENT:	Fecal Coliform	SPECIFIC CONDUCTIVITY (mS/cm):	0.021	0.238	0.159	0.153	0.049
NEIGHBORING LANDUSE:	Residential and commercial	DISSOLVED OXYGEN (mg/L):	3.0	8.6	5.8	5.8	0.8
SPATIAL LOCATION:	Most downstream site						
TOTAL NO. STORMS OVER 0.1 INCH:	11						
MAX. DAILY RAINFALL:	1.1 inches						
TOTAL RAINFALL (FOR PERIOD):	3.9 inches						



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Monitoring Periodic Report**

Kinley Creek B (July 7, 2014 -- Aug 12, 2014)

Explanation of Statistics:

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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	
	Time	Result	Time	Result	Time	Result
<i>Escherichia coli</i> (MPN/100mL)						
Total Suspended Solids (mg/L)						
Total Phosphorus (mg/L)						
Total Nitrogen (mg/L)						