

Kinley Creek Monitoring Sites

Data Gaps

- Neither of the Kinley Creek stations observed any data gap periods during this deployment.

SCDHEC Standards

- The Kinley Creek monitoring stations did not record any violations of the pH standard during this monitoring period.
- The KINB station did not record any DO values below the SCDHEC minimum standard. However, the DO at the KINA station dropped to very low levels during the latter part of this monitoring period. This monitoring period was very dry, with only 1.2 inches of rain recorded at the Kinley Creek rain gage. The stage at the KINA station dropped to low levels, and the water in the vicinity of the station was likely stagnant, which may have contributed to the low DO levels recorded.

Storm Events

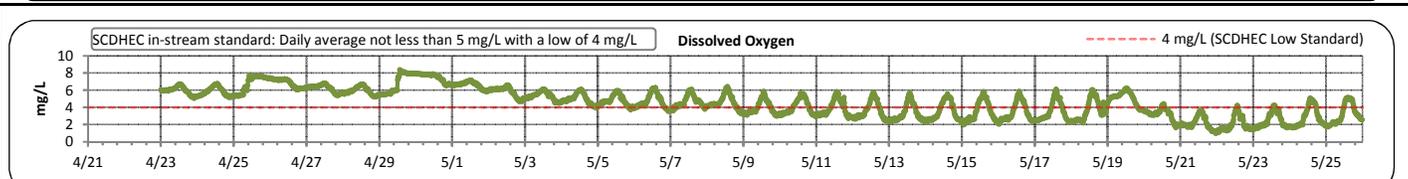
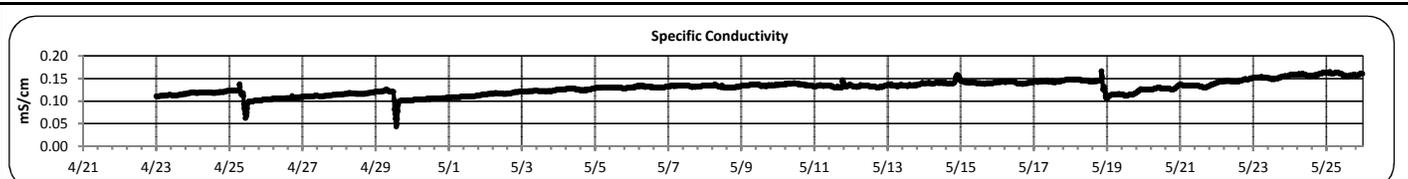
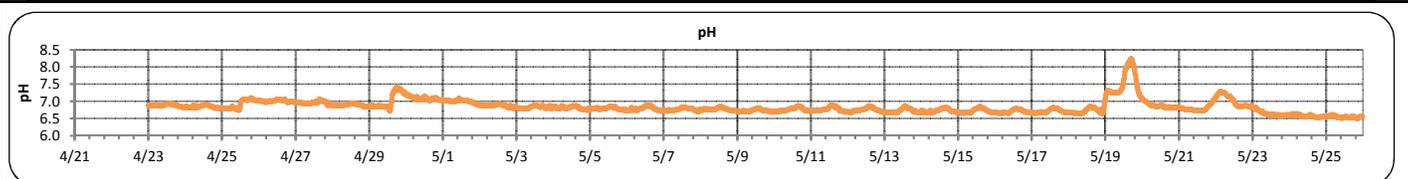
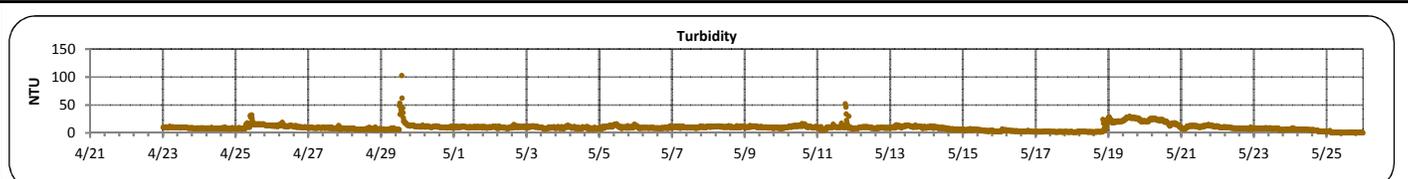
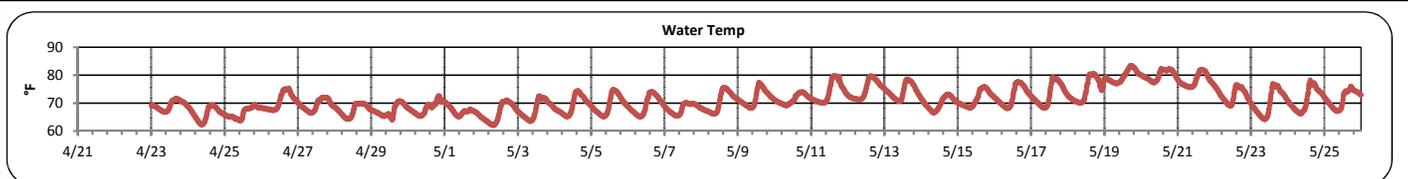
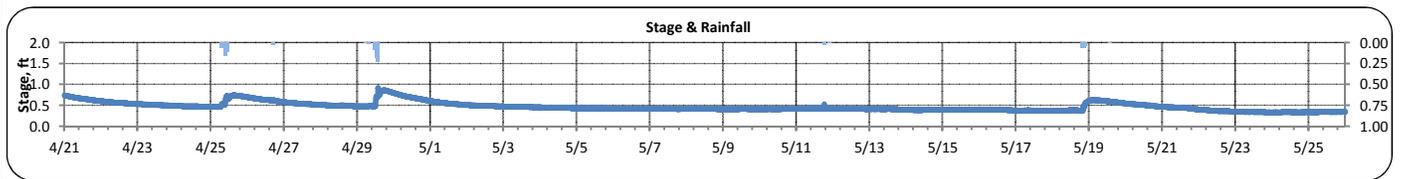
- The Kinley Creek rain gage recorded only 3 rain events during this monitoring period, with the largest event at only 0.6 inches.

Potential Illicit Discharges and Abnormal Events

- At the KINA station, 1 potential illicit discharge event was recorded, and a recurring illicit discharge was identified.
 - On May 14th, the specific conductivity in the creek increased slightly, staying at elevated levels for 3 hours.
 - During this deployment period, a source of concentrated suspended solids was noted entering Kinley Creek shortly upstream of the KINA station during the storm event on April 29th. A field investigation revealed the source of this sediment to be an eroding parcel of land located in Lexington County that was recently annexed by the Town of Irmo. City personnel are working with SCDOT, the Town of Irmo, and the property owner to determine a course of action to reduce the erosion at this site. This sediment was observed entering Kinley Creek during the April 29th event, and it should be noted that this illicit discharge is likely recurring during significant rain events in the watershed.
- At KINB, 5 potential illicit discharges were recorded:
 - On May 1st, May 4th, and May 5th, the specific conductivity levels in the creek increased, along with a very slight increase in stage. Each of these events occurred near midday, and lasted for a few hours. These events may have been a recurring activity.
 - On May 13th, the specific conductivity, pH, and stage increased while the temperature of the water decreased slightly. Additionally, there was a slight increase in turbidity shortly before this event, which may have been associated with this suspected illicit discharge.
 - On May 22nd, an increase in specific conductivity, DO, pH, and turbidity was noted, along with a slight increase in stage. No cause for this event was immediately apparent.

Kinley Creek A (April 21, 2015 -- May 25, 2015)

PARAMETER	DESCRIPTION	CONTINUOUS WATER QUALITY PARAMETERS:	SUMMARY STATISTICS				
			MINIMUM OBSERVED	MAXIMUM OBSERVED	MEDIAN OBSERVED	MEAN OBSERVED	STANDARD DEVIATION
STREAM NAME:	Kinley Creek	STAGE (FT):	0.3	0.9	0.4	0.5	0.1
LOCATION:	Longhorn Steakhouse	TEMPERATURE (°F):	62	83	70	71	4
ADDRESS:	171 Harbison Blvd Columbia, SC 29212	TURBIDITY (NTU):	1	103	9	9	6
COORDINATES:	34.069897, -81.164592	pH:	6.5	8.3	6.8	6.8	0.2
TMDL/IMPAIRMENT:	Fecal Coliform	SPECIFIC CONDUCTIVITY (mS/cm):	0.043	0.167	0.132	0.129	0.016
NEIGHBORING LANDUSE:	Residential and commercial	DISSOLVED OXYGEN (mg/L):	1.0	8.4	4.7	4.6	1.7
SPATIAL LOCATION:	Most upstream site						
TOTAL NO. STORMS OVER 0.1 INCH:	3						
MAX. DAILY RAINFALL:	0.6 inches						
TOTAL RAINFALL (FOR PERIOD):	1.2 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 (April 21, 2015 -- May 25, 2015)

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.

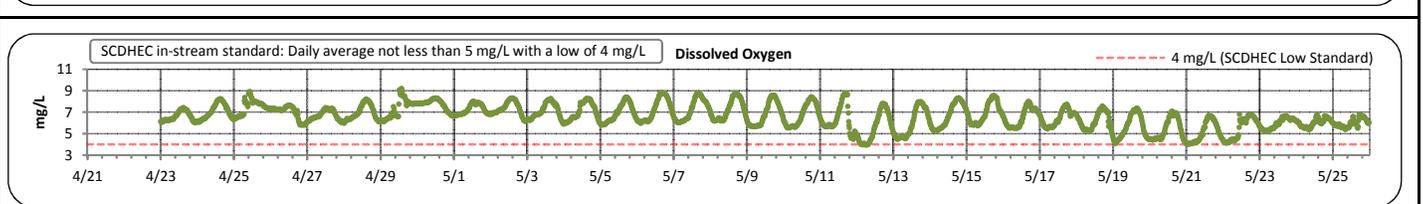
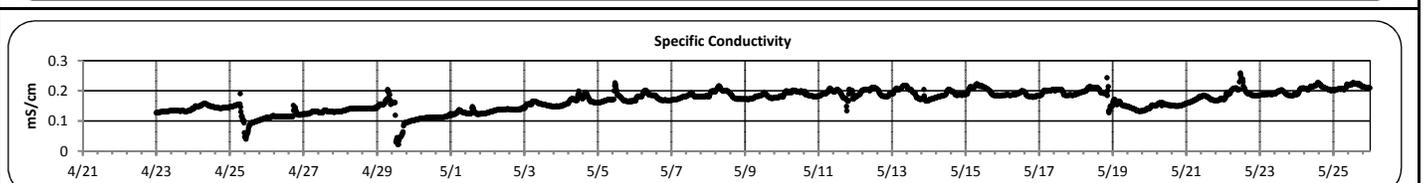
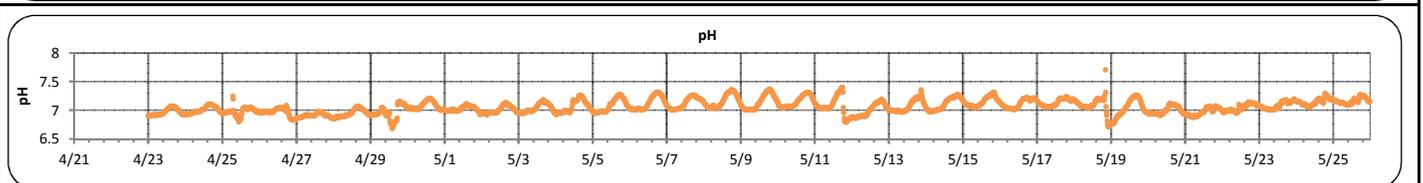
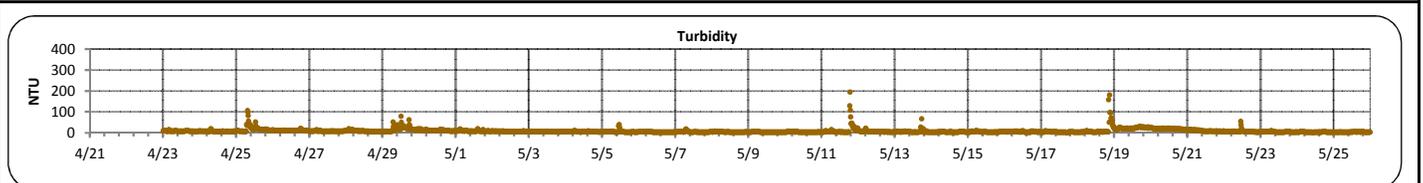
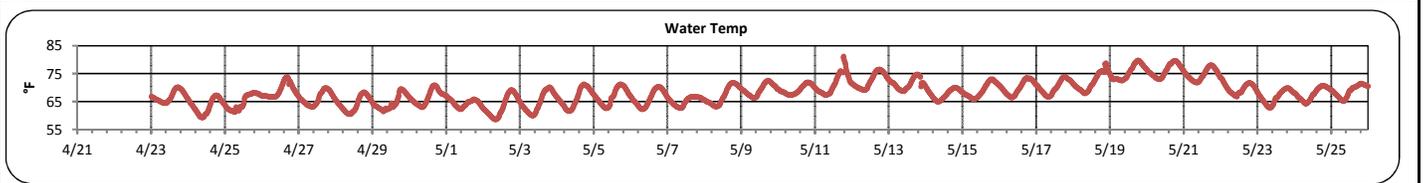
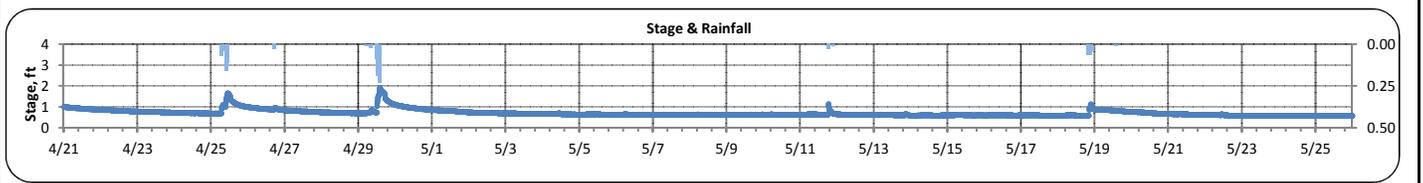
Grab Sample Data:

Analyte (units)	Sample 1		Sample 2		Sample 3			
	4/29/2015		4/29/2015		4/29/2015			
	Time	Result	Time	Result	Time	Result	Time	Result
<i>Escherichia coli</i> (MPN/100mL)	13:28	7270.0	13:37	5,794	13:50	14,140		
Total Suspended Solids (mg/L)	13:28	92	13:37	64	13:50	36		
Total Phosphorus (mg/L)	13:28	0.13	13:37	0.11	13:50	0.12		
Total Nitrogen (mg/L)	13:28	1.43	13:37	1.17	13:50	1.12		

Note: An illicit discharge occurred during this storm event. The discharge was entering the City through a pipe, though the discharge began outside of the City's jurisdiction. The correct procedures for notifying the owner of the illicit discharge was followed.

Kinley Creek B (April 21, 2015 -- May 25, 2015)

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	1.9	0.6	0.7	0.2
LOCATION:	Broken Hill Rd	TEMPERATURE (°F):	59	81	68	68	4
ADDRESS:	609 Broken Hill Rd Columbia, SC 29212	TURBIDITY (NTU):	3	195	6	9	10
COORDINATES:	34.06635, -81.159986	pH:	6.7	7.7	7.1	7.1	0.1
TMDL/IMPAIRMENT:	Fecal Coliform	SPECIFIC CONDUCTIVITY (mS/cm):	0.021	0.259	0.174	0.167	0.034
NEIGHBORING LANDUSE:	Residential and commercial	DISSOLVED OXYGEN (mg/L):	4.0	9.2	6.6	6.6	1.1
SPATIAL LOCATION:	Most downstream site						
TOTAL NO. STORMS OVER 0.1 INCH:	3						
MAX. DAILY RAINFALL:	0.6 inches						
TOTAL RAINFALL (FOR PERIOD):	1.2 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 (April 21, 2015 -- May 25, 2015)

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	
	Time	Result	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: