

Gills Creek Monitoring Sites

Data Gaps

- The GILA sonde was unsubmerged during the middle portion of the monitoring period, with most probes out of the water between August 13th and August 29th.
- The GILB station experienced one incident of turbidity fouling during the deployment period.
- The GILC station did not experience any data interruptions during this monitoring period.

SCDHEC Standards

- The GILA and GILC stations did not record any violations of the DHEC DO standards. At the GILB station, a period of low DO levels was recorded from August 14th through August 30th, during dry weather conditions.
- The pH at the GILA and GILC stations fell slightly below the SCDHEC standard of 6, with both stations recording a minimum value of 5.9.

Storm Events

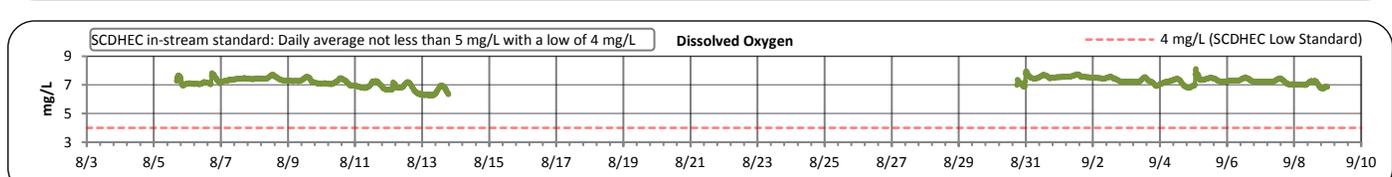
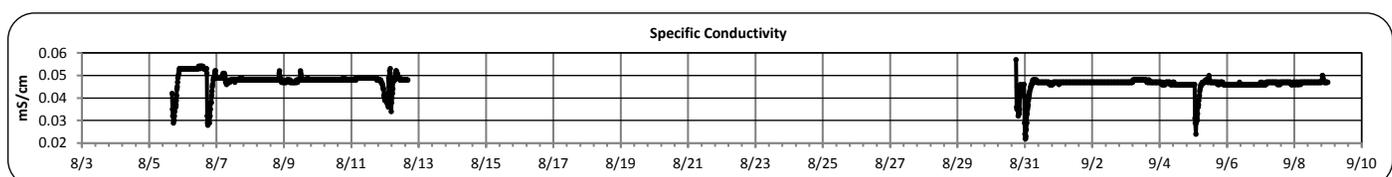
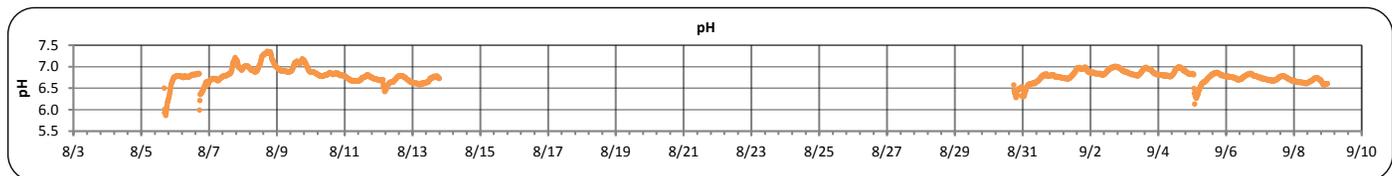
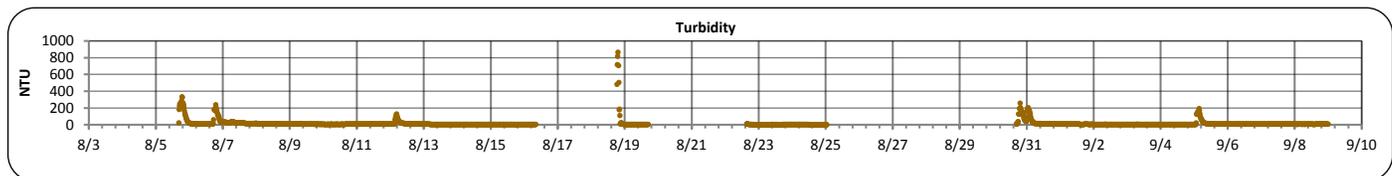
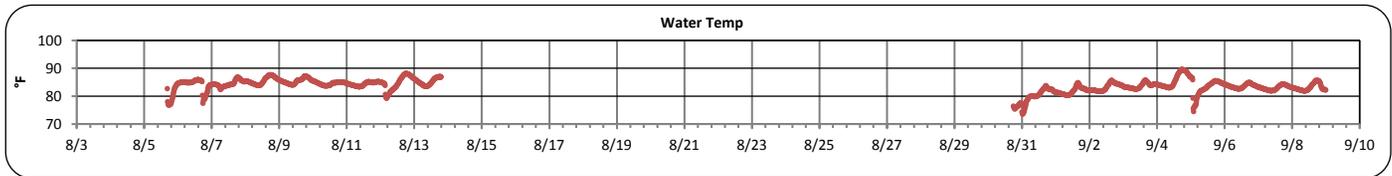
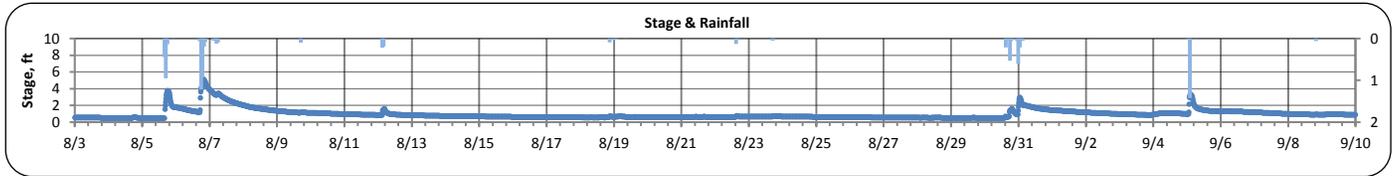
- Several large storm events were recorded at the Gills Creek station during this monitoring period, totaling 8.5 inches, 10.3 inches, and 9.6 inches at the GILA, GILB, and GILC rain gages, respectively.
- The most significant storm event of this deployment period occurred on the evening of August 6th, when approximately 2.5 inches of rainfall was recorded at all of the GIL stations.

Potential Illicit Discharges and Abnormal Events

- One potential illicit discharge event was noted in the data from this deployment period. At the GILB station between the evening of August 26th and the morning of August 27th, the specific conductivity in Gills Creek increased notably and the turbidity levels also showed a slight increase.

Gills Creek A (August 3, 2015 -- September 9, 2015)

PARAMETER	DESCRIPTION	CONTINUOUS WATER QUALITY PARAMETERS:	SUMMARY STATISTICS				
			MINIMUM OBSERVED	MAXIMUM OBSERVED	MEDIAN OBSERVED	MEAN OBSERVED	STANDARD DEVIATION
STREAM NAME:	Gills Creek	STAGE (FT):	0.5	5.2	0.7	1.0	0.6
LOCATION:	Forest Drive Bridge	TEMPERATURE (°F):	74	90	84	84	2
ADDRESS:	4840 Forest Drive, Columbia, SC 29206	TURBIDITY (NTU):	3	867	8	17	48
COORDINATES:	34.019826, -80.963566	pH:	5.9	7.4	6.8	6.8	0.2
TMDL/IMPAIRMENT:	Fecal & Dissolved Oxygen	SPECIFIC CONDUCTIVITY (mS/cm):	0.022	0.057	0.047	0.047	0.004
NEIGHBORING LANDUSE:	Residential and commercial	DISSOLVED OXYGEN (mg/L):	6.3	8.1	7.3	7.2	0.3
APPROX. DRAINAGE AREA:	48 square miles						
SPATIAL LOCATION:	Most upstream site						
TOTAL NO. STORMS OVER 0.1 INCH:	8						
MAX. DAILY RAINFALL:	2.5 inches						
TOTAL RAINFALL (FOR PERIOD):	8.5 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**

Gills Creek A (August 3, 2015 -- September 9, 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:

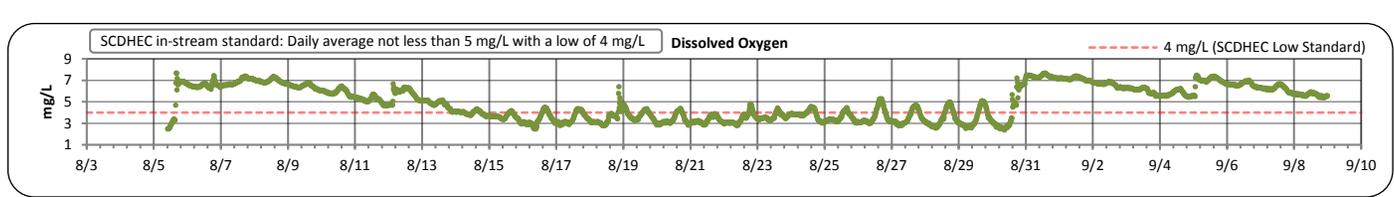
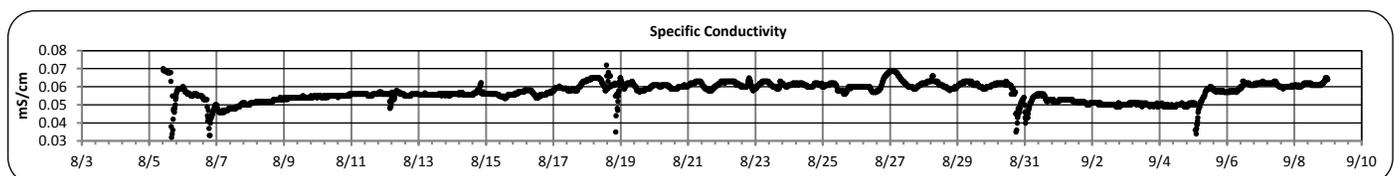
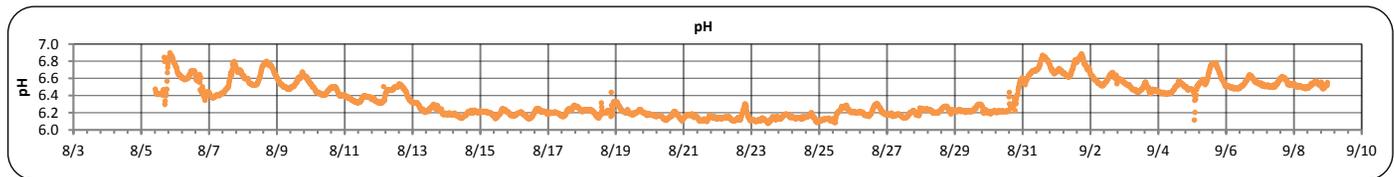
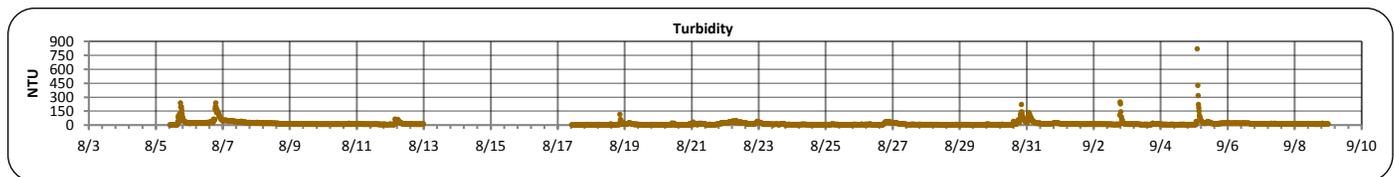
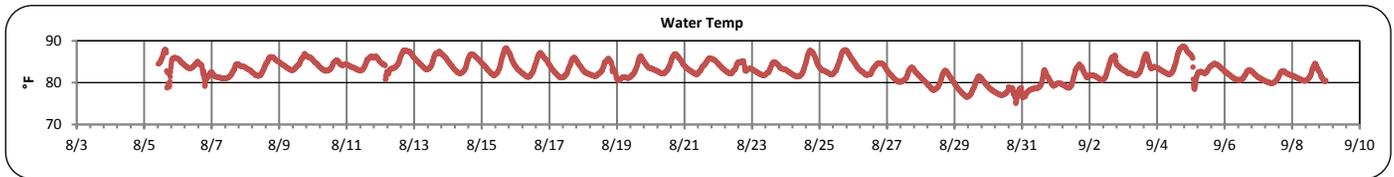
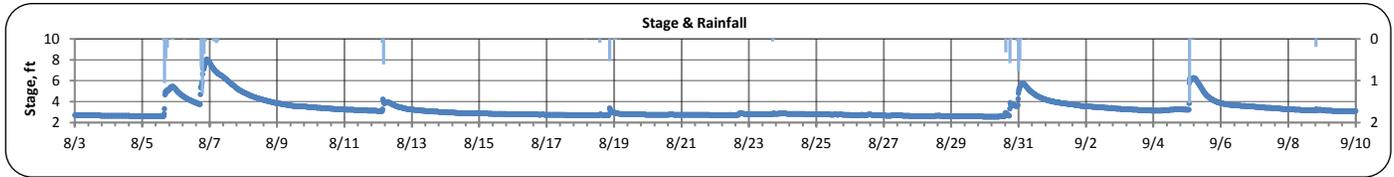
Analyte (units)	Sample 1		Sample 2		Sample 3		Sample 4	
	8/18/2015							
	Time	Results	Time	Results	Time	Results	Time	Results
<i>Escherichia coli</i> (MPN/100mL)	11:32	386						
Total Suspended Solids (mg/L)								
Total Phosphorus (mg/L)								
Total Nitrogen (mg/L)								

Notes: Sample was collected during dry conditions at baseflow.

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

Gills Creek B (August 3, 2015 -- September 9, 2015)

PARAMETER	DESCRIPTION	CONTINUOUS WATER QUALITY PARAMETERS:	SUMMARY STATISTICS				
			MINIMUM OBSERVED	MAXIMUM OBSERVED	MEDIAN OBSERVED	MEAN OBSERVED	STANDARD DEVIATION
STREAM NAME:	Gills Creek	STAGE (FT):	2.6	8.1	3.0	3.3	0.9
LOCATION:	Devine Street bridge	TEMPERATURE (°F):	75	89	83	83	2
ADDRESS:	4716 Devine Street Columbia, SC 29209	TURBIDITY (NTU):	3	821	12	18	27
COORDINATES:	33.989656, -80.97433	pH:	6.1	6.9	6.3	6.4	0.2
TMDL/IMPAIRMENT:	Fecal & Dissolved Oxygen	SPECIFIC CONDUCTIVITY (mS/cm):	0.032	0.072	0.058	0.057	0.005
NEIGHBORING LANDUSE:	Residential and commercial	DISSOLVED OXYGEN (mg/L):	2.4	7.7	4.9	5.0	1.5
APPROX. DRAINAGE AREA:	59 square miles						
SPATIAL LOCATION:	Middle site						
TOTAL NO. STORMS OVER 0.1 INCH:	10						
MAX. DAILY RAINFALL:	2.4 inches						
TOTAL RAINFALL (FOR PERIOD):	10.3 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**

Gills Creek B (August 3, 2015 -- September 9, 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:

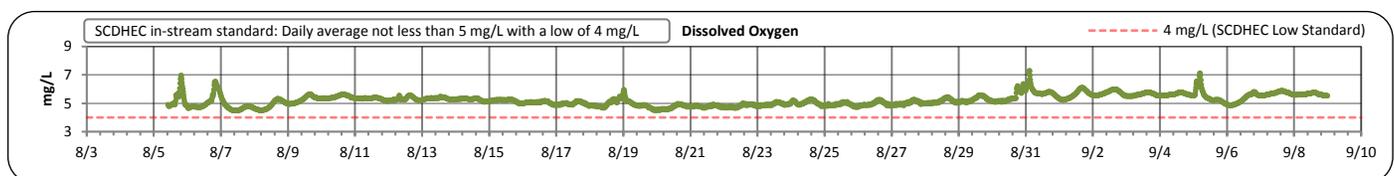
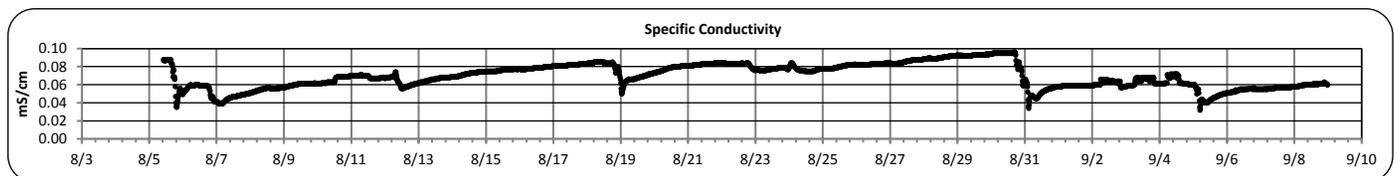
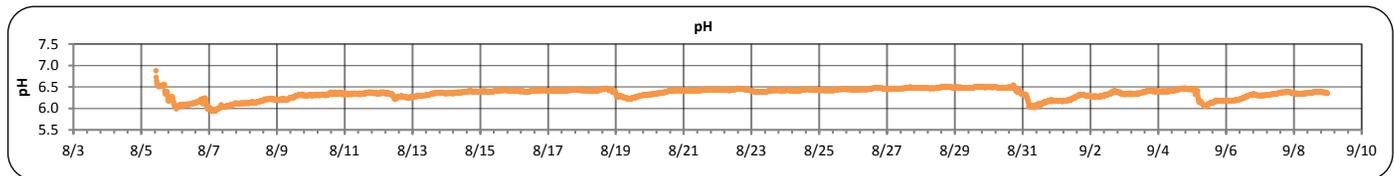
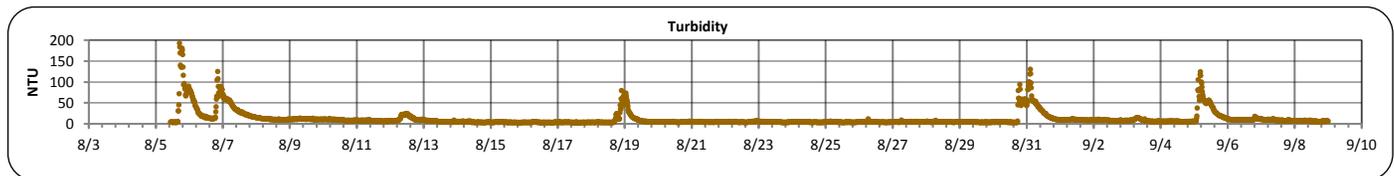
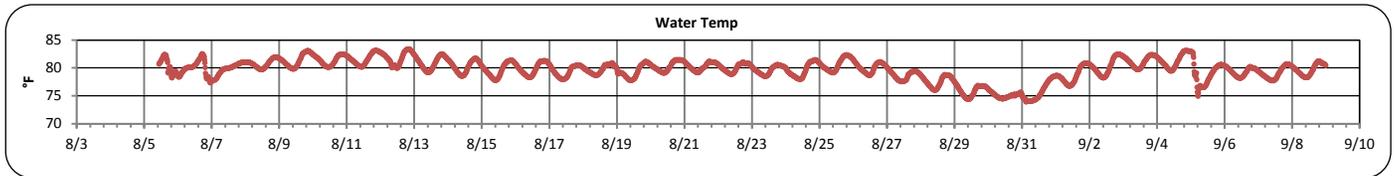
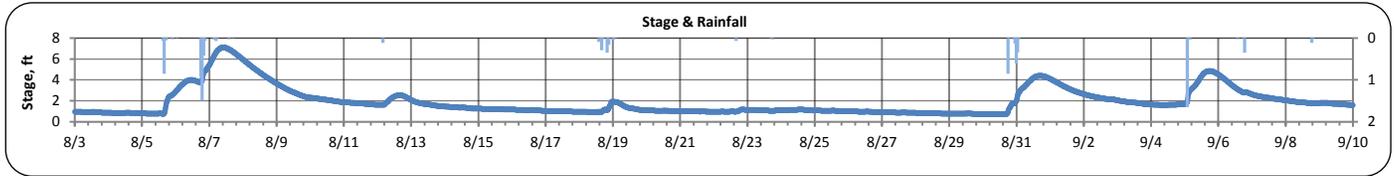
Analyte (units)	Sample 1		Sample 2		Sample 3		Sample 4	
	8/18/2015							
	Time	Results	Time	Results	Time	Results	Time	Results
<i>Escherichia coli</i> (MPN/100mL)	12:05	104						
Total Suspended Solids (mg/L)								
Total Phosphorus (mg/L)								
Total Nitrogen (mg/L)								

Notes: Sample was collected during dry conditions at baseflow.

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

Gills Creek C (August 3, 2015 -- September 9, 2015)

PARAMETER	DESCRIPTION	CONTINUOUS WATER QUALITY PARAMETERS:	SUMMARY STATISTICS				
			MINIMUM OBSERVED	MAXIMUM OBSERVED	MEDIAN OBSERVED	MEAN OBSERVED	STANDARD DEVIATION
STREAM NAME:	Gills Creek	STAGE (FT):	0.7	7.2	1.5	1.9	1.3
LOCATION:	Bluff Road bridge	TEMPERATURE (°F):	74	83	80	80	2
ADDRESS:	3009 Bluff Rd. Columbia, SC 29209	TURBIDITY (NTU):	3	193	6	12	18
COORDINATES:	33.948043, -80.9889	pH:	5.9	6.9	6.4	6.4	0.1
TMDL/IMPAIRMENT:	Fecal & Dissolved Oxygen	SPECIFIC CONDUCTIVITY (mS/cm):	0.032	0.096	0.069	0.070	0.013
NEIGHBORING LANDUSE:	Residential and commercial	DISSOLVED OXYGEN (mg/L):	4.5	7.3	5.2	5.2	0.4
APPROX. DRAINAGE AREA:	64 square miles						
SPATIAL LOCATION:	Most downstream site						
TOTAL NO. STORMS OVER 0.1 INCH:	10						
MAX. DAILY RAINFALL:	2.89 inches						
TOTAL RAINFALL (FOR PERIOD):	9.6 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**

Gills Creek C (August 3, 2015 -- September 9, 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	
	8/18/2015							
	Time	Results	Time	Results	Time	Results	Time	Results
<i>Escherichia coli</i> (MPN/100mL)	12:32	20						
Total Suspended Solids (mg/L)								
Total Phosphorus (mg/L)								
Total Nitrogen (mg/L)								

Notes: Sample was collected during dry conditions at baseflow.

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