Kinley Creek Monitoring Sites Monitoring Data Summary for February 15th, 2018 – March 27th, 2018

Data Gaps

- The KINA station did not experience any data gaps during this deployment period.
- The KINB station experienced some turbidity fouling after the storm events on March 1st and 21st. These short periods of data were removed from the dataset.

SCDHEC Standards

- Neither of the Kinley Creek monitoring stations recorded pH readings outside of the SCDHEC acceptable range of 6 to 8.5.
- KINA and KINB stations recorded average DO concentrations of 8.5 mg/L and 8.0 mg/L, respectively, well above the SCDHEC daily average standard of 5 mg/L.
- The instantaneous minimum DO values recorded at the KINA and KINB stations were 6.4 mg/L and 5.6 mg/L, respectively. These values are above the SCDHEC instantaneous minimum standard of 4.0 mg/L.

Storm Events

- The rain gauge along Kinley Creek recorded 8 storm events over this deployment period that resulted in 3.5 inches of precipitation.
- Both KINA and KINB stations recorded typical storm event responses during this monitoring period.
- The maximum antecedent dry time since the last significant precipitation event (at least 0.1 inches) was approximately 13.6 days in the Kinley Creek watershed occurring prior to the storm event on February 25th.

Potential Illicit Discharges and Abnormal Events

- Specific conductivity was slightly elevated at both Kinley Creek stations from the beginning of this deployment period to February 24th. This period of higher specific conductivity is most likely from the discharge of the upstream control structure being reduced, noticed from the Campbell Scientific pressure transducer data.
- At KINB on February 21st, a potential illicit discharge was observed in the turbidity data. Turbidity reached 200 NTUs during this period.

Flow Measurements

• There were not any flow measurements taken at the Kinley Creek stations during this deployment period.



Continuous Water Quality Monitoring Periodic Report



Kinley Creek A (February 15, 2018 -- March 27, 2018)

		CONTINUOUS	SUMMARY STATISTICS					
PARAMETER	DESCRIPTION	WATER QUALITY PARAMETERS:	MINIMUM OBSERVED	MAXIMUM OBSERVED	MEDIAN OBSERVED	MEAN OBSERVED	STANDARD DEVIATION	
STREAM NAME:	Kinley Creek	STAGE (FT):	0.4	1.5	0.5	0.6	0.2	
LOCATION:	Longhorn Steakhouse							
ADDRESS:	171 Harbison Blvd Columbia, SC 29212	TEMPERATURE (°F):	50	71	59	59	4	
COORDINATES:	34.069897, -81.164592	TURBIDITY (NTU):	1	214	9	9	7	
TMDL/IMPAIRMENT:	Fecal Coliform	TONDIDITY (ICTO):	·	214	J	ŭ	,	
NEIGHBORING LANDUSE:	Residential and commercial	pH:	6.8	7.4	7.1	7.1	0.1	
SPATIAL LOCATION:	Most upstream site							
TOTAL NO. STORMS OVER 0.1 INCH:	8	SPECIFIC CONDUCTIVITY (mS/cm):	0.024	0.252	0.114	0.126	0.029	
MAX. DAILY RAINFALL:	1.0 inches	DISSOLVED						
TOTAL RAINFALL (FOR PERIOD):	3.5 inches	OXYGEN (mg/L):	6.4	10.1	8.6	8.5	0.8	
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2/15 2/17 2/19	2/21 2/23 2/25 2/27 3/1	3/3 3/5 3/7	3/9 3/11 3	/13 3/15 3/:	17 3/19 3/21	3/23 3/23	5/2/	
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		Specific Con	ductivity					
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8 0.25 0.20 0.15 0.10 0.05 0.00								
0.05		T		•				
2/15 2/17 2/19	2/21 2/23 2/25 2/27 3/	1 3/3 3/5 3/7	3/9 3/11	3/13 3/15	3/17 3/19 3/	21 3/23 3/2	5 3/27	
SCOHEC in-stream stans	dard: Daily average not less than 5 mg/L wit	h a low of 4 mg/l Dissolve	ed Oxygen			- 4 mg/L (SCDHEC L	ow Standard)	
11	ΛΛΛΛΑΑΛΑ		-A-A-A	~~~~	1000	g/E (SODITEC D	Staridard)	
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3								
2/15 2/17 2/19	2/21 2/23 2/25 2/27 3,	/1 3/3 3/5 3/7	3/9 3/11	3/13 3/15	3/17 3/19 3/	/21 3/23 3/2	5 3/27	

Continuous Water Quality Monitoring Periodic Report

Kinley Creek A (February 15, 2018 -- March 27, 2018)

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	
	2/26/2018							
(units)	Time	Result	Time	Result	Time	Result	Time	Result
Escherichia coli (MPN/100mL)	10:55	406						
Total Suspended Solids (mg/L)								
Total Phosphorus (mg/L)								
Total Nitrogen (mg/L)								

Note: One sample was collected at this site at the start of rain event, however, the rain event produced less rain than expected so further samples were not collected.



Continuous Water Quality Monitoring Periodic Report



Kinley Creek B (February 15, 2018 -- March 27, 2018)

PARAMETER DESCRIPTION	CONTINUOUS SUMMARY STATISTICS										
COCATION: Broken Hill Rd ADDRESS: 609 Broken Hill Rd Columbia, SC 28212 COORDINATES: 34 06635, 81 159986 TMDL/IMPAIRMENT: Fecal Coliform NEIGHBORING LANDUSE: Residential and commercial SANDUSE: SPATIAL LOCATION: Most downstream site TOTAL NO. STORMS 8	PARAMETER	DESCRIPTION									
ADDRESS: 609 Broken Hill Rd Columbia, SC 23/212 COORDINATES: 34.06635, 81.159886 TMDL/IMPAIRMENT: Fecal Coliform NEIGHBORING LANDUSE: Period Coliform NEIGHBORING ANDUSE: PATIAL LOCATION: Most downstream site TOTAL No. STORMS OVER C1 INCH: SPECIFIC CONDUCTIVITY (mS/cm): 0.032 0.179 0.125 0.130 0.028 MAX. DALLY RAINFALL (FOR PERIOD): DISSOLVED OXYGEN (mg/L): 5.6 10.2 8.1 8.0 1.0 TOTAL RAINFALL (FOR PERIOD): Stage & Rainfall Stage	STREAM NAME:	Kinley Creek		STAGE (FT):	0.6	3.2	0.8	0.9	0.2		
ADDRESS: Columbia, 8C 25212 COORDINATES: 34.06635, 81.169986 TMDL/IMPAIRMENT: Feeal Coliform NEIGHBORING Residential and commercial LANDUSE: PATIAL LOCATION: Most downstream site TOTAL NO. STORMS OVER 0.1 INCH: 8 MAX. DAILY RAINFALL: 1.0 inches TOTAL NO. STORMS OVER 0.1 INCH: 8 MAX. DAILY RAINFALL: 1.0 inches TOTAL RAINFALL: 1.0 inches TOTAL RAINFALL: 1.0 inches DISSOLVED OXYGEN (rig/L): 5.6 10.2 8.1 8.0 1.0 Value Temp Water Temp Water Temp Water Temp Water Temp Water Temp Turbidity PH Turbidit	LOCATION:	Broken Hill Rd									
TOTAL NO. STORMS MAX. DAILY RAINFALL: TOTAL RAINFALL (FOR PERIOD): TOTAL RAINFALL (FOR PERIOD): TURBIDITY (NTU): 1 435 10 13 20 TURBIDITY (NTU): 1 435 10 10 1	ADDRESS:			TEMPERATURE (°F):	47	74	58	59	5		
Page	COORDINATES:	34.06635, -81.159986		TURRIDITY (NITU).	4	425	10	12	20		
PH:	TMDL/IMPAIRMENT:										
TOTAL NO. STORMS OVER 0.1 INCH: MAX. DAILY RAINFALL: 1.0 inches DISSOLVED OXYGEN (mg/L): Stage & Rainfall Water Temp Water Temp Turbidity PH Turbidity PH PH PH PH PH PH PH PH PH P		Residential and commercial									
TOTAL RIO, STORMS OVER 0.1 INCH: MAX. DAILY RAINFALL: TOTAL RAINFALL (FOR PERIOD): Stage & Rainfall Water Temp Water Temp Turbidity PH Turbidity PH PH PH PH PH PH PH PH PH P	SPATIAL LOCATION:	Most downstream site									
TOTAL RAINFALL (FOR PERIOD): Stage & Rainfall	TOTAL NO. STORMS 8 CONDUCTIVITY 0.032 0.179 0.125 0.130 0.028										
## Stage & Rainfall Stage & Rainfall Stage & R		1.0 inches		DISSOLVED OXYGEN		40.0					
Stage & Rainfall Water Temp Water Temp Turbidity Turbidity Pa 20 20 11 2/17 2/19 2/21 2/23 2/25 2/27 3/1 3/3 3/5 3/7 3/9 3/11 3/13 3/15 3/17 3/19 3/21 3/23 3/25 3/27		3.5 inches		(mg/L):	5.6	10.2	8.1	8.0	1.0		
Water Temp Turbidity Turbidity P Turbidity Turbidity P Turbidity Turbidity Turbidity P Turbidity Turb	Stage & Rainfall										
2/15 2/17 2/19 2/21 2/23 2/25 2/27 3/1 3/3 3/5 3/7 3/9 3/11 3/13 3/15 3/17 3/19 3/21 3/23 3/25 3/27	2/15 2/17 2/19 75 65 45 2/15 2/17 2/19 75 45 2/15 2/17 2/19 77 10 10 10 10 10 10 10 10 10 10 10 10 10	2/21 2/23 2/25 2/27 3	33/1	Water Tem 3/3 3/5 3/7 Turbidity 3/3 3/5 3/7	p 3/9 3/11 3/	/13 3/15 3/1	7 3/19 3/21	3/23 3/25	3/27		
	0.15 0.10 0.05 0.00 2/15 2/17 2/19	2/21 2/23 2/25 2/27	3/1	3/3 3/5 3/7	3/9 3/11	3/13 3/15 3	/17 3/19 3/:	21 3/23 3/25	5 3/27		
0.05 0.05	SCDHEC in-stream star 11 9 7 7 5 3 2/15 2/17 2/19	ndard: Daily average not less than 5 mg/L	L wit	nannin	^^^	3/13 3/15 3	/17 3/19 3/	4 mg/L (SCDHEC Low 21 3/23 3/23	w.		

Continuous Water Quality Monitoring Periodic Report

Kinley Creek B (February 15, 2018 -- March 27, 2018)

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	Sample 1		Sample 2		Sample 3		Sample 4	
(units)	2/26/2018							
(units)	Time	Result	Time	Result	Time	Result	Time	Result
Escherichia coli (MPN/100mL)	11:10	1,040						
Total Suspended								
Solids (mg/L)								
Total Phosphorus								
(mg/L)								
Total Nitrogen								
(mg/L)								

Note: One sample was collected at this site at the start of rain event, however, the rain event produced less rain than expected so further samples were not collected.