Kinley Creek Monitoring Sites Monitoring Data Summary for October 3rd, 2019 – November 6th, 2019

Data Gaps

 Neither of the Kinley Creek monitoring stations experienced interruptions in the data during this monitoring period.

SCDHEC Standards

- Both Kinley Creek monitoring stations recorded pH readings that were within the SCDHEC acceptable range of 6 to 8.5.
- The KINA and KINB station recorded average DO concentrations of 5.4 mg/L and 6.7 mg/L respectively, which are both well above the SCDHEC daily average standard of 5 mg/L.
- The instantaneous minimum DO value recorded at the KINA station was 2 mg/L, which is below the SCDHEC instantaneous minimum standard of 4 mg/L. These low DO values were recorded during an extended dry period, likely caused by low flow conditions in the creek.
- The instantaneous minimum DO value recorded at the KINB station was 4.7 mg/L, which is above the SCDHEC instantaneous minimum standard of 4 mg/L.

Storm Events

- The rain gauge along Kinley Creek recorded 8 storm events during this deployment period that resulted in a total of 3.2 inches of precipitation.
- The KINA station mostly recorded typical response patterns to storm events during this monitoring period. The pH and DO increased in response to the storm events on October 16th and 20th which are not typical storm response patterns for those parameters.
- The KINB station recorded typical storm response patterns during this monitoring period.
- The maximum antecedent dry time since the last significant precipitation event (at least 0.1 inches) was approximately 12.8 days in the Kinley Creek watershed, occurring before the storm event on October 13th.

Potential Illicit Discharges and Abnormal Events

- At the KINA station, the specific conductivity increased significantly on October 3rd-4th.
- There were no potential illicit discharges or abnormal events observed at the KINB station.

Flow Measurements

• No flow measurements were taken in the Kinley Creek watershed during this deployment period.



Continuous Water Quality Monitoring Periodic Report



Kinley Creek A (October 3, 2019 - November 6, 2019)

		CONTINUOUS	SUMMARY STATISTICS							
PARAMETER	DESCRIPTION	WATER QUALITY PARAMETERS:	MINIMUM OBSERVED	MAXIMUM OBSERVED	MEDIAN OBSERVED	MEAN OBSERVED	STANDARD DEVIATION			
STREAM NAME:	Kinley Creek	STAGE (FT):	0.0	1.3	0.6	0.7	0.1			
LOCATION:	Longhorn Steakhouse	TEMPERATURE								
ADDRESS:	171 Harbison Blvd Columbia, SC 29212	(°F):	56	81	69	69	4			
COORDINATES:	34.069897, -81.164592	TURBIDITY (NTU):	1	163	5	6	7			
TMDL/IMPAIRMENT:	Fecal Coliform	TOKBIDITT (NTO).	'	103	5		,			
NEIGHBORING LANDUSE:	Residential and commercial	pH:	6.3 7.2		6.7	6.7	0.1			
SPATIAL LOCATION:	Most upstream site									
TOTAL NO. STORMS OVER 0.1 INCH:	8	SPECIFIC CONDUCTIVITY (mS/cm):	0.025	0.258	0.104	0.117	0.034			
MAX. DAILY RAINFALL:	0.7 inches	DISSOLVED								
TOTAL RAINFALL (FOR PERIOD):	3.2 inches	OXYGEN (mg/L):	2.0	8.4	5.4	5.4	1.3			
		Stage & Rai	nfall							
# 3 2							0.0			
t 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2						-	0.5			
10/3 10/5 10/7	10/9 10/11 10/13 1	10/15 10/17 10/19	10/21 10/23	10/25 10/27	10/29 10/31	11/2 11/	1.5			
90		Water Te	mp							
80 # 70	~~~~									
60 50										
10/3 10/5 10/7	10/9 10/11 10/13	10/15 10/17 10/19	10/21 10/23	10/25 10/27	10/29 10/31	11/2 11/	4 11/6			
							. 11/0			
		Turbid	ity							
200		Turbid	ity			•				
F 150 100 50		Turbid	ity			•				
150	/7 10/9 10/11 10/13	Turbid	10/21 10/23	10/25 10/27	10/29 10/3		/4 11/6			
E 100 50 0	/7 10/9 10/11 10/13			10/25 10/27	10/29 10/3					
E 150 50 0	/7 10/9 10/11 10/13			10/25 10/27	10/29 10/3					
F 7.5	/7 10/9 10/11 10/13	10/15 10/17 10/19		10/25 10/27	10/29 10/3					
E 150 100 10/3 10/5 10	/7 10/9 10/11 10/13	10/15 10/17 10/19		10/25 10/27	10/29 10/3					
7.5 7.0		10/15 10/17 10/19		10/25 10/27	10/29 10/3	11 11/2 11				
E 150 100 10/3 10/5 10		10/15 10/17 10/19 pH 10/15 10/17 10/19	10/21 10/23	-		11 11/2 11	/4 11/6			
7.5 7.0 10/3 10/5 10/5 10/5 10/7		10/15 10/17 10/19	10/21 10/23	-		11 11/2 11	/4 11/6			
7.5 7.0 10/3 10/5 10/5 10/5 10/7		10/15 10/17 10/19 pH 10/15 10/17 10/19	10/21 10/23	-		11 11/2 11	/4 11/6			
7.5 100 100/3 10/5 10 10/3 10/5 10/7		10/15 10/17 10/19 pH 10/15 10/17 10/19	10/21 10/23	-		11 11/2 11	/4 11/6			
7.5 Ta (-10/3 10/5 10/7 10/7 10/7 10/7 10/7 10/7 10/7 10/7	10/9 10/11 10/13	10/15 10/17 10/19 pH 10/15 10/17 10/19	10/21 10/23	-	10/29 10/3	1 11/2 11	/4 11/6			
7.5 100/3 10/5 10 10/3 10/5 10/7 E 0.3 0.3 0.3 10/3 10/5 10/7	7 10/9 10/11 10/13	10/15 10/17 10/19 pH 10/15 10/17 10/19 Specific Co	10/21 10/23 10/21 10/23 nductivity	10/25 10/27	10/29 10/3	1 11/2 11	/4 11/6 /4 11/6			
7.5 7.0 10/3 10/5 10/5 10/5 10/7 10/7 10/7 10/7 10/7	10/9 10/11 10/13	10/15 10/17 10/19 pH 10/15 10/17 10/19 Specific Co	10/21 10/23 10/21 10/23	10/25 10/27	10/29 10/3	1 11/2 11	/4 11/6			
7.5 7.0 10/3 10/5 10/5 10/7 10/3 10/5 10/7 10/7 10/7	7 10/9 10/11 10/13	10/15 10/17 10/19 pH 10/15 10/17 10/19 Specific Co	10/21 10/23 10/21 10/23 nductivity	10/25 10/27	10/29 10/3	1 11/2 11	/4 11/6			

Continuous Water Quality Monitoring Periodic Report

Kinley Creek A (October 3, 2019 - November 6, 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		Sample 5	
	10/7/2019		10/16/2019		10/16/2019		10/16/2019		10/16/2019	
(units)	Time	Result	Time	Result	Time	Result	Time	Result	Time	Result
Escherichia coli (MPN/100mL)	10:40	1864	8:25	15,400	9:10	7308	10:25	6510	11:20	4494
Total Suspended Solids (mg/L)			8:25	16	9:10	14.9	10:25	10.8	11:20	12.5
Total Phosphorus (mg/L)			8:25	0.18	9:10	0.16	10:25	0.12	11:20	0.12
Total Nitrogen (mg/L)			8:25	1.03	9:10	1.03	10:25	1.13	11:20	1.34

Note: Sample 1 was taken during dry weather conditions. Samples 2, 3, 4, and 5 were taken during wet weather conditions.



Continuous Water Quality Monitoring Periodic Report



Kinley Creek B (October 3, 2019 - November 6, 2019)

		SUMMARY STATISTICS						
PARAMETER	DESCRIPTION	WATER QUALITY PARAMETERS:	MINIMUM OBSERVED	MAXIMUM OBSERVED	MEDIAN OBSERVED	MEAN OBSERVED	STANDARD DEVIATION	
STREAM NAME:	Kinley Creek	STAGE (FT):	0.5	2.1	0.6	0.7	0.2	
LOCATION:	Broken Hill Rd		=0			00	_	
ADDRESS:	609 Broken Hill Rd Columbia, SC 29212	TEMPERATURE (°F):	53	81	69	68	5	
COORDINATES:	34.06635, -81.159986	TURBIDITY (NTU):	1	88	5	7	6	
TMDL/IMPAIRMENT:	Fecal Coliform	TOKBIBITT (NTO).	•	00	3	,	O	
NEIGHBORING LANDUSE:	Residential and commercial	pH:	6.2	7.1	6.9	6.8	0.1	
SPATIAL LOCATION:	Most downstream site	pri.	0.2	7.1	0.5	0.0	0.1	
TOTAL NO. STORMS OVER 0.1 INCH:	8	SPECIFIC CONDUCTIVITY (mS/cm):	0.022	0.189	0.107	0.118	0.040	
MAX. DAILY RAINFALL:	0.7 inches	DISSOLVED OXYGEN	4.7	0.0	6.7	6.7	0.8	
TOTAL RAINFALL (FOR PERIOD):	3.2 inches	(mg/L):	4.7	8.9	6.7	6.7	0.8	
		Stage & Rainfa	all	-	-	-	-	
# 4							0.00	
t 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2							0.75	
10/3 10/5 10/7	10/9 10/11 10/13 1	0/15 10/17 10/19 10,	/21 10/23	10/25 10/27	10/29 10/31	11/2 11/4	1.50 11/6	
10/5 10/5 10/7	10/5 10/11 10/15 1	3/13 10/17 10/13 10/	21 10/25	10/25 10/27	10/23 10/31	11/2 11/4	11/0	
		Water Tem	D					
90		Water Tem	p					
80			p					
80 70 60	~~~~	Water Tem	P			~~~		
80 70 60 50	10/9 10/11 10/13 1		~\	10/25 10/27	10/29 10/31	11/2 11/	4 11/6	
80 70 60	10/9 10/11 10/13 1		p //21 10/23	10/25 10/27	10/29 10/31	11/2 11/	4 11/6	
80 70 60 50 10/3 10/5 10/7	10/9 10/11 10/13 1	0/15 10/17 10/19 10	//21 10/23	10/25 10/27	10/29 10/31	11/2 11/	4 11/6	
80 70 60 50 10/3 10/5 10/7	10/9 10/11 10/13 1		//21 10/23	10/25 10/27	10/29 10/31	11/2 11/	11/6	
80 60 50 10/3 10/5 10/7		0/15 10/17 10/19 10	//21 10/23	10/25 10/27	10/29 10/31	11/2 11/	4 11/6	
80 70 60 50 10/3 10/5 10/7		0/15 10/17 10/19 10)/21 10/23	10/25 10/27	10/29 10/31	11/2 11/	4 11/6	
80 70 60 50 10/3 10/5 10/7		0/15 10/17 10/19 10 Turbidity	//21 10/23	10/25 10/27	10/29 10/31		11/6	
80 70 60 10/3 10/5 10/7		0/15 10/17 10/19 10 Turbidity 10/15 10/17 10/19)/21 10/23					
100 10/3 10/5 10/5 10/7 10/7 10/7 10/7 10/7 10/7 10/7 10/7		0/15 10/17 10/19 10 Turbidity)/21 10/23					
80 60 10/3 10/5 10/7 10/7 10/7 10/7 10/7 10/7 10/7 10/7 10/7 10/7 10/7 10/7 10/7 10/7		0/15 10/17 10/19 10 Turbidity 10/15 10/17 10/19)/21 10/23					
100 10/3 10/5 10/7 1		0/15 10/17 10/19 10 Turbidity 10/15 10/17 10/19)/21 10/23					
100 10/3 10/5 10/7 1	/7 10/9 10/11 10/13	0/15 10/17 10/19 10 Turbidity 10/15 10/17 10/19 pH	10/23			11/2 11		
80 70 60 10/3 10/5 10/7 10/7 10/7 10/7 10/7 10/7 10/7 10/7	/7 10/9 10/11 10/13	0/15 10/17 10/19 10 Turbidity 10/15 10/17 10/19 pH	10/21 10/23	10/25 10/27	10/29 10/3	11/2 11	11/6	
80 70 60 10/3 10/5 10/7 10/7 10/7 10/7 10/7 10/7 10/7 10/7	/7 10/9 10/11 10/13	0/15 10/17 10/19 10 Turbidity 10/15 10/17 10/19 pH	10/21 10/23	10/25 10/27	10/29 10/3	11 11/2 11	/4 11/6	
80 60 50 10/3 10/5 10/7 75 25 0 10/3 10/5 10/7	/7 10/9 10/11 10/13	0/15 10/17 10/19 10 Turbidity 10/15 10/17 10/19 pH	10/21 10/23	10/25 10/27	10/29 10/3	11 11/2 11	/4 11/6	
100 10/3 10/5 10/7 1	/7 10/9 10/11 10/13	0/15 10/17 10/19 10 Turbidity 10/15 10/17 10/19 pH	10/21 10/23	10/25 10/27	10/29 10/3	11 11/2 11	11/6	
80 60 10/3 10/5 10/7	/7 10/9 10/11 10/13 10/9 10/11 10/13	0/15 10/17 10/19 10 Turbidity 10/15 10/17 10/19 pH Specific Conc	10/21 10/23	10/25 10/27	10/29 10/3	1 11/2 11	/4 11/6	
100 75 10/3 10/5 10/7 10/	7 10/9 10/11 10/13 10/9 10/11 10/13	0/15 10/17 10/19 10 Turbidity 10/15 10/17 10/19 pH Specific Conc 10/15 10/17 10/19 1	10/21 10/23 10/21 10/23 10/21 10/23	10/25 10/27	10/29 10/3	1 11/2 11	11/6	
80 70 60 10/3 10/5 10/7	/7 10/9 10/11 10/13 10/9 10/11 10/13	0/15 10/17 10/19 10 Turbidity 10/15 10/17 10/19 pH Specific Conc 10/15 10/17 10/19	10/21 10/23 10/21 10/23 10/21 10/23	10/25 10/27	10/29 10/3	1 11/2 11	11/6	
80 70 60 50 10/3 10/5 10/7 100 75 50 25 0 10/3 10/5 10/7 10/5 10/7	7 10/9 10/11 10/13 10/9 10/11 10/13	0/15 10/17 10/19 10 Turbidity 10/15 10/17 10/19 pH Specific Conc 10/15 10/17 10/19 1	10/21 10/23 10/21 10/23 10/21 10/23	10/25 10/27	10/29 10/3	1 11/2 11	11/6	
80 10/3 10/5 10/7 10	7 10/9 10/11 10/13 10/9 10/11 10/13 7 10/9 10/11 10/13 ndard: Daily average not less than 5 mg/L	0/15 10/17 10/19 10 Turbidity 10/15 10/17 10/19 pH Specific Conc 10/15 10/17 10/19 with a low of 4 mg/L Dissolved	10/21 10/23 10/21 10/23 10/21 10/23	10/25 10/27	10/29 10/3 10/29 10/3	1 11/2 11 1 11/2 11 1 11/2 11 4 mg/L (SCDHEC Low	11/6	

Continuous Water Quality Monitoring Periodic Report

Kinley Creek B (October 3, 2019 - November 6, 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.

Sampled Data:

Analyto	Sample 1		Sample 2		Sample 3		Sample 4		Sample 5	
Analyte (units)	10/7/2019		10/16/2019		10/16/2019		10/16/2019		10/16/2019	
(units)	Time	Result	Time	Result	Time	Result	Time	Result	Time	Result
Escherichia coli (MPN/100mL)	10:59	374	8:45	1454	9:25	3936	10:45	9222	11:35	3444
Total Suspended Solids (mg/L)			8:45	43.9	9:25	20.4	10:45	12.8	11:35	20.7
Total Phosphorus (mg/L)			8:45	0.08	9:25	0.1	10:45	0.082	11:35	0.084
Total Nitrogen (mg/L)			8:45	0.49	9:25	0.7	10:45	0.82	11:35	1.06

Note: Sample 1 was taken during dry weather conditions. Samples 2, 3, 4, and 5 were taken during wet weather conditions.