

# Lake Greenwood Continuous Monitoring Study Periodic Report

November 30, 2018 - March 5, 2019

This study funded through a joint effort consisting of Greenwood County Lake Management (GCLM), Laurens County Water and Sewer Commission (LCWSC), City of Greenville, and Renewable Water Resources (ReWa).

# Continuous Monitoring Report

## Lake Greenwood at River Fork Rd

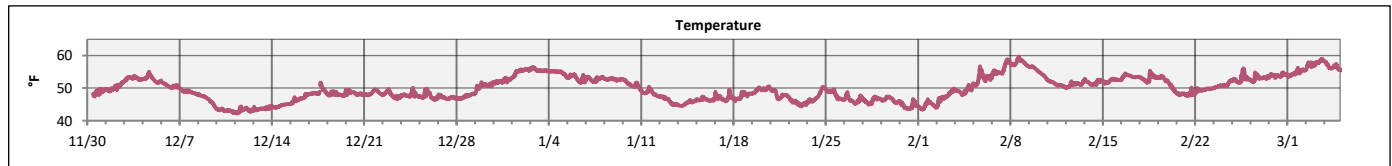
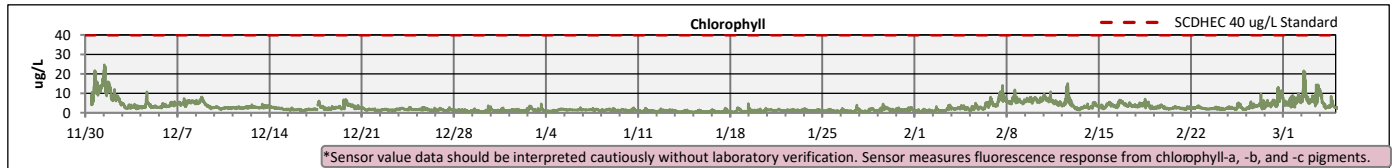
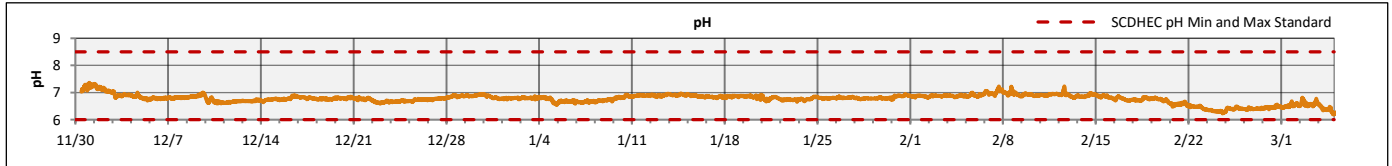
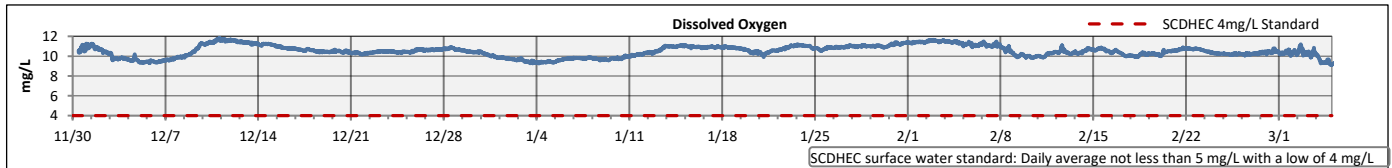
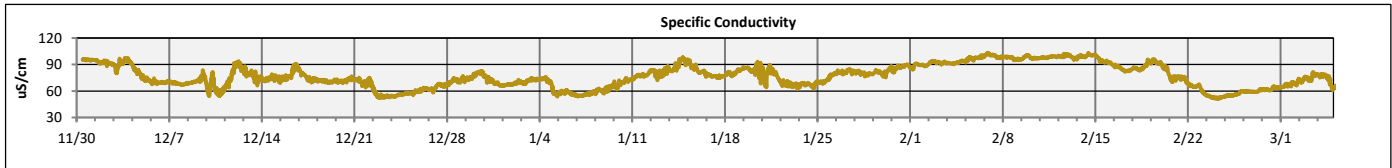
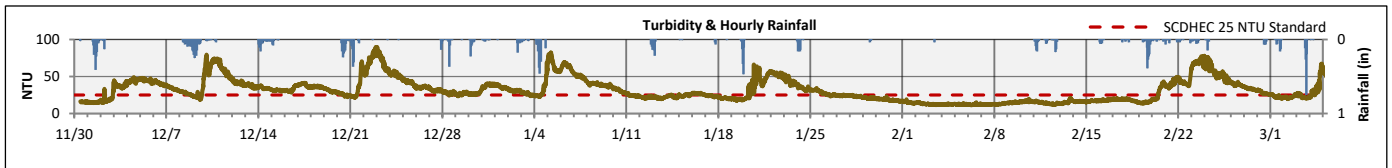
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MONITORING LOCATION CHARACTERISTICS	
Station Location Name	River Fork
Latitude	34.327842 °N
Longitude	82.109702 °W
Approximate Drainage Area	398 square miles

RAINFALL CHARACTERISTICS	
Data collected at rain gauge located at Ekum Beach Road crossing of Reedy River	
Number of Storms Over 0.1 in"	15
Max Storm Rainfall	3.02 in
Total Rainfall for Period (Length of deployment: 13.5 weeks)	15.27 in

CONTINUOUS WATER QUALITY PARAMETERS:	SUMMARY STATISTICS				
	MIN	MAX	MEDIAN	MEAN	ST. DEV.
Turbidity (NTU):	11	90	28	31	15
Sp. Conductivity (uS/cm):	51	103	76	77	13
Dissolved Oxygen (mg/L):	9.1	11.8	10.5	10.5	0.6
pH:	6.2	7.4	6.8	6.8	0.2
Chlorophyll* (ug/L)	0.3	25	2	3	2
Temperature (°F)	42	60	49	50	4





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## Explanation of Statistics:

MIN	The minimum value recorded by the datasonde during the reporting period.
MAX	The maximum value recorded by the datasonde during the reporting period.
MEDIAN	The median value represents the 50th percentile of the distribution of all values recorded during the reporting period. Half of the recorded values during this period fell above the median value and half fell below this value.
MEAN	The average of all the 15-minute values recorded by the datasonde during this reporting period.
ST. DEV.	The standard deviation is a measure of the variation within a dataset. A large standard deviation indicates significant variability in the dataset and a small standard deviation represents low variability.

## Discrete Sample Results Collected to Date at River Fork Location

Analyzed by Pace Analytical and ETT Environmental Laboratories

Sample Date	Collected By	TSS mg/L	TN mg/L	TKN mg/L	NO3+NO2 mg/L	TP mg/L	Chl-a ug/L
12/5/2018 9:24	GCLM	20.4	1.00	--	0.70	0.068	7.6
12/12/2018 8:45	GCLM	19.0	0.90	--	0.52	0.085	5.0
1/9/2019 8:30	GCLM	23.6	1.20	0.6*	0.55	0.087	--
1/16/2019 8:58	GCLM	12.7	0.86	--	0.86	0.076	--
1/30/2019 9:00	GCLM	14.1	0.68	--	0.52	0.060	8.0
2/6/2019 8:45	GCLM	8.2	1.80	0.69	1.10	--	2.8

These samples are collected in order to provide information on parameters which cannot be reliably measured in-situ. These sample results may be used in the future to develop statistical relationships with continuously monitored parameters in an effort to estimate continuous concentrations of these parameters. A sufficient sample size for regression analysis is typically 20 samples or more collected across a range of weather conditions.

\* Sample extraction/preparation and analysis conducted outside the EPA method holding time.

## Definitions

Chl-a	Chlorophyll-a
ND	Non Detected at the Reporting Limit
NO3+NO2	Nitrate + Nitrite as Nitrogen
TKN	Total Kjeldahl Nitrogen
TN	Total Nitrogen
TP	Total Phosphorus
TSS	Total Suspended Solids