Water Quality Monitoring for the Lake Conway Point Removed Watershed (Hydrologic Unit 11110203)

Project 19-900 319 Nonpoint Source Pollution Management Program

Prepared For:
Natural Resource Division
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EXECUTIVE SUMMARY

Equilibrium, a 501(c)3 non-profit organization based out of Little Rock, Arkansas, established ten water quality monitoring stations within an assemblage of sub-basins (12- digit HUCs) throughout the Lake Conway Point Remove HUC (11110203) for the purpose of projecting parameter loads.

Equilibrium implemented the project through the accomplishments of numerous tasks; summarized as: Project Design and Development of QAPP, Data Collection, and Data Verification, and Reporting. Equilibrium maintained communication with key project partners to efficiently implement this project.

Routine water samples were collected from various streams on a weekly basis from October 2019 through September 2022. Including routine, field QA, and lab QA samples, more than 2100 samples were analyzed. Samples were analyzed for Total Phosphorus (TP), Total Kjeldahl Nitrogen (TKN), Ammonia-Nitrogen (NH_3-N), Turbidity, Total Suspended Solids (TSS), Sulfate (SO_4), Chloride (Cl^-), and Nitrate+Nitrite Nitrogen (NO_3+NO_2-N). Total Nitrogen was calculated from summation of appropriate nitrogen species (TKN and NO_3+NO_2-N). All samples were analyzed by laboratories certified under the Arkansas Department of Energy and Environment's Division of Environmental Quality (ADEQ). Furthermore, upon accessing the stations, in-situ data was recorded. Those parameters were pH, specific conductance, dissolved oxygen, and temperature.

Water levels were measured at the monitoring stations with electronic pressure transducers or by the USGS. Hydrographs were produced for each station for the project period from daily average stage data. Acoustic Doppler technologies were used to survey stream velocities and area profiles at various flow regimes via Sontek® instrumentation.

Computations and statistical analyses were performed and reported for the developed stage rating discharge curves including analysis of variances, descriptive statistics of parameter concentrations, statistical determination of concentration trend analysis, extrapolations of monthly, annual parameter loadings and unit area loadings, and the linear regression analysis of monthly loadings.

Trends for concentrations for NO_3+NO_2-N and SO_4 concentrations and turbidity values significantly decreased at most all stations throughout the period. Loading is greatly influenced by discharge. Discharge was the greatest during the first year period of the project; mostly, annual parameter loadings followed suit. At numerous stations, data collected during the project is indicative of what can be considered normal to high water quality.

Equilibrium owes immense gratitude to Clark Kuyper at the Ouachita Baptist University Water Lab and staff at Arkansas' Natural Resources Division, Nonpoint Source Pollution Program. Their support enabled this project's success.

FUNDING AND COLLABORATION

Funding to support this project was provided by the Arkansas Natural Resources Commission and the Environmental Protection Agency based on Section 319 of the Clean Water Act.

This project was dependent on the coordination of multiple partnerships whose combined efforts and resources ensured a successful project implementation and execution. Below is a list of key partners and a brief description of their roles in the project:

Natural Resources Division, Nonpoint Source Management Program provided funding, project oversight and management, and technical assistance to ensure project success.

U.S. Environmental Protection Agency (EPA) provided funding for this project. Their funding has been vital to the project's existence and implementation.

Ouachita Baptist University (OBU) committed technical assistance through its science department and provided laboratory analytical services through the OBU State Certified Water Chemistry Laboratory. Additionally, OBU provided match that has been vital to the project's existence and implementation.

GOALS AND OBJECTIVES

The goal of this project was to collect, analyze, and report water quality and discharge data so that annual parameter loadings and unit area loadings could be estimated for numerous 12-digit HUCs within the Lake Conway-Point Remove Watershed. This goal was accomplished through the development and implementation of a monitoring program that focuses on the collection of water quality and discharge data; the analysis of water samples with a verifiable level of accuracy and precision; the estimation of daily discharge throughout the project period; statistical evaluations and models derived from the collected and analyzed data; and finally, the reporting of monitoring results as constituent loadings.

PROJECT TIMELINE

This project was conducted from October 2019 through October 2022. The following table details the anticipated time frame for individual project tasks.

Task	Subtask Number	Description	Start Date	Completion Date
1	**1.1**	Conduct fiscal review of project revenues	10/1/2019	9/30/2022
2	**2.1**	Develop draft the QAPP	10/1/2019	10/7/2019
	2.2	Edit and revise the QAPP per ANRC comments.	10/7/2019	10/21/2019
	2.3	Finalize QAPP	10/21/2019	10/30/2019
3	**3.1**	Install pressure transducers at ten monitoring stations	10/1/2019	11/1/2019
	3.2	Collect grab samples and routine QAQC samples (approximately 1872) on scheduled basis and deliver to lab	10/1/2019	9/30/2022
	3.3	Record in-situ data at each monitoring station	10/1/2019	9/30/2022
	3.4	Record any deviations from sampling protocols including possible sample contamination or sampler error	10/1/2019	9/30/2022
	3.5	Analyze approximately 1872 samples	10/1/2019	9/30/2022
4	**4.1**	Survey the streams' profile at the monitoring stations	10/1/2019	9/30/2022
	4.2	Collect velocity measurements at the monitoring stations	10/1/2019	9/30/2022
	4.3	Continually collect stage height data at the monitoring stations	10/1/2019	9/30/2022
5	**5.1**	Annually prepare data into a compatible format that meets the requirements of WQX	10/1/2020	9/30/2022
	5.2	Annually import the collected water quality data into the data warehouse via WQX	10/1/2020	9/30/2022
	5.3	Annually validate the importation of data in the data warehouse	10/1/2020	9/30/2022
6	**6.1**	Statistical analysis between discharge and stage data to establish stage rating discharge curve at each monitoring station	7/1/2022	9/30/2022
	6.2	Statistical analysis comparing results between each monitoring station	7/1/2022	9/30/2022
	6.3	Retrieve and perform statistical analysis of available data within the Lake Conway Point Remove watershed to data collected during this project	7/1/2022	9/30/2022
7	**7.1**	Quarterly reports	10/1/2019	9/30/2022
	7.2	Quarterly QAPP report	10/1/2019	9/30/2022
	7.3	Annual report	7/1/2020	9/30/2022
	7.4	Final Report	7/1/2022	9/30/2022

Table 1. Proposed Project Timeline

BACKGROUND

The Lake Conway-Point Remove watershed drains approximately 730,000 acres in the Arkansas River Valley region and a small portion of the Boston Mountain region in central and north-central Arkansas. Much of the watershed lies in, what is known as the Interior Highland Region, where the Arkansas Valley transitions into the Ozark Plateau Physiographic Province. The watershed spans portions of seven counties in central Arkansas (Conway, Faulkner, Perry, Pope, Pulaski, Van Buren, and Yell).

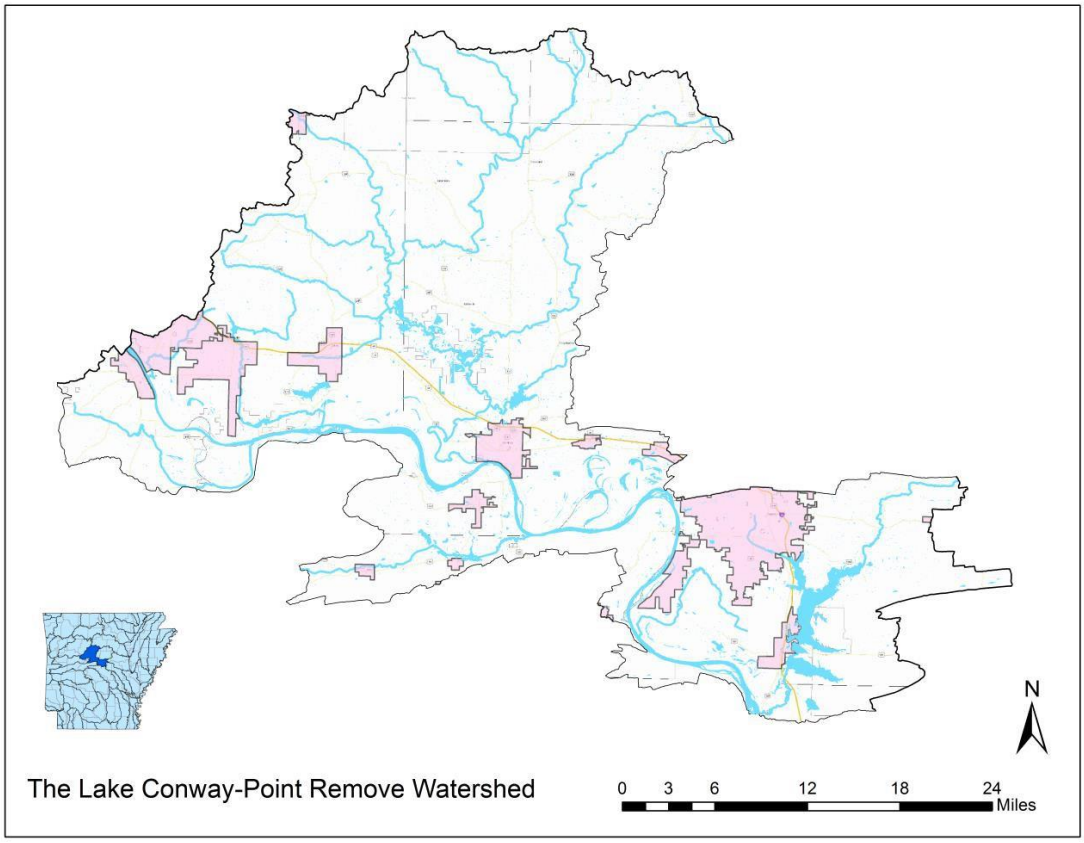

Figure 1 The Lake Conway-Point Remove Watershed (HUC 11110203), located in central Arkansas.

Geology

The Lake Conway-Point Remove watershed, as well as this region of the state from the Arkansas River Valley through the Boston Mountains Region is dominated by Pennsylvanian-age rock of the Atoka Formation. The Atoka Formation is over 10,000 feet thick and is faulted and folded. East-west trending normal faults are common. The rock strata generally dip to the south as does the surface elevation. The Atoka is characterized by a thick sequence of marine sedimentary rocks consisting of mostly tan to grey siltstones, sandstones and grayish-black shales. The Atoka Formation has the largest areal extent of any of the Paleozoic formations in the state. It caps the Boston Mountains to the north and dominates exposures in the Arkansas River Valley to the south. The Atoka Formation has been subdivided into upper, middle, and lower lithic members based on regionally mappable shale or sandstone intervals. While outcrops of the Atoka Formation are found throughout the Arkansas River Valley, much of the surficial geology is dominated by Quaternary alluvial deposits and Quaternary alluvial terrace deposits (Taff, 1900).

In the figure below, although individual members of the Atoka Formation are not depicted, the area on the geologic map shaded green represents the general sedimentary terrain of the Atoka Formation. The areas shaded pink on the map represent the alluvial deposits of the river valleys, while the areas shaded yellow represent the terrace deposits, and blue is water.

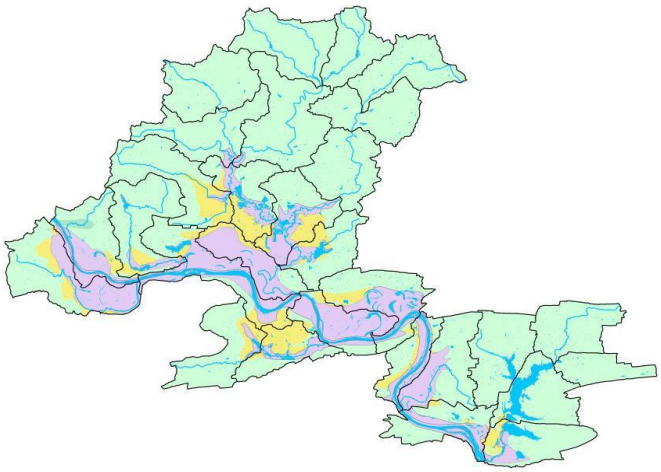

Figure 2 Surficial geology of the Lake Conway-Point Remove Watershed. (AWIS, 2014)

Major Rivers and Streams

The streams in the Lake Conway-Point Remove watershed are dendritic drainage systems, whereas many contributing streams are joined together into the tributaries of the main river. The Arkansas River is the main stem or primary draining vessel in the watershed; it flows from west to east across the southernmost portions of the watershed. Streams originating in the Boston Mountains Region in the northern parts of the watershed, flow southward and eventually into the Arkansas River. Streams in the southern parts of the watershed are characteristically different than streams in the northern portions of the basin. Streams in the southern portion of the watershed are low- gradient and often flow through bottomland hardwood forests and cypress-tupelo swamps.

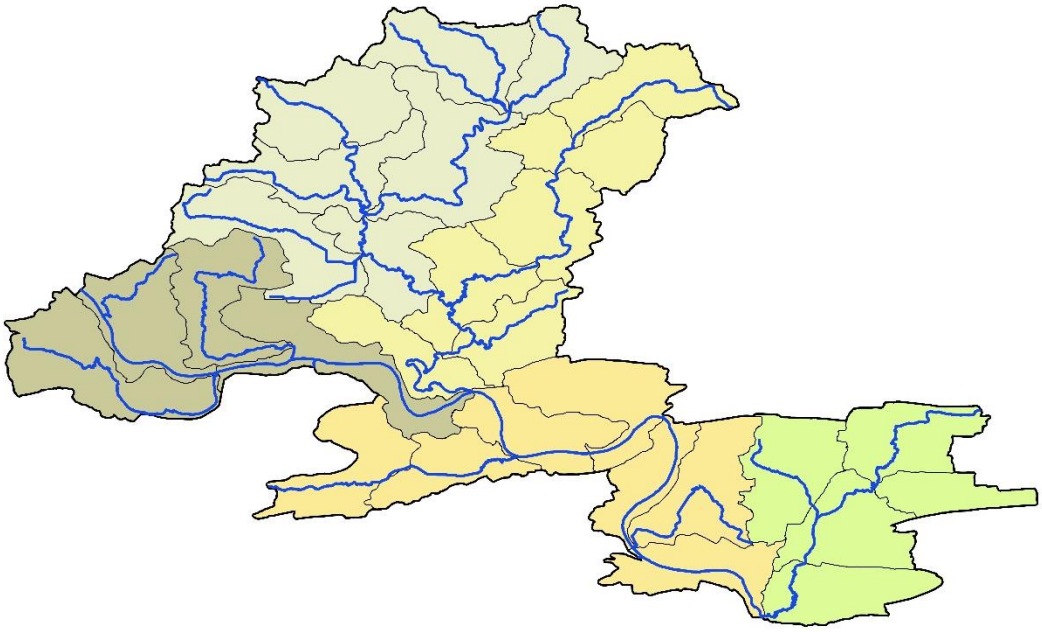

Figure 3 Lake Conway-Point Remove Watershed with major rivers and streams. (DTSS, 2023)

There are several major streams in the watershed, all of which eventually flow into the Arkansas River. Emerging in the northernmost portions of the watershed are the West and East Forks of the Point Remove Creek, which both flow southward and converge near the town of Hattieville. The confluence is within the Ed Gordon Wildlife Management Area (WMA) where Point Remove Creek is formed from the combination of the two forks. Point Remove Creek flows south of the Interstate 40 Corridor and meanders to its confluence with the Arkansas River, south of the city of Morrilton.

Galla Creek and Harris Creek originate in the western part of the Lake Conway- Point Remove watershed. Galla Creek is formed near the town of Pottsville and flows south. Harris Creek emerges on the south side of the Arkansas River Valley, flows into Smiley Bayou, and eventually drains into the Arkansas River at Holla Bend National Wildlife Refuge (NWR), about eight miles downriver from Dardanelle, AR. The NWR consists of about 7,000 acres and lies on a bend on the river that was cut off when the U.S. Corps of Engineers straightened the river in 1957.

Rocky Cypress Creek is in the south-central portion of the watershed, near Perry, AR. It emerges on the south side of the Arkansas River Valley and flows into the Arkansas River at River Bend WMA as Cypress Creek.

The southeastern portion of the Lake Conway-Point Remove watershed consists of Palarm Creek and its tributaries. Palarm Creek originates northwest of the city of Conway and flows southward to its confluence with Lake Conway, a 6,700-acre man-made fishing lake. Below the dam, on the downstream side of Lake Conway, Palarm Creek winds through Grassy Lake area and Bell Slough WMA, a bottom land hardwood forest and tupelo-cypress swamp, before eventually draining into the Arkansas River.

Figure 4 Lake Conway-Point Remove Watershed with major rivers and streams labeled. (DTSS, 2023)

Land Use and Topography

The land use in the Lake Conway-Point Remove watershed is characterized as predominately forested, especially in the headwater (northern) portion of the basin. Pastures are mosaicked throughout the forested areas and agricultural land use constitutes much of the Arkansas River Valley in the southern portion of the basin. The land use percentages are as follows: forested 44%; pastureland 28%; developed (urban) 9%; cultivated crops 7%; wetlands 5%; open water 3%; grassland/herbaceous 3%; and shrub/scrub 1% (Stroud, 2023). The watershed is generally rural; however, several cities, such as Conway, Morrilton, Atkins, and the eastern portion of Russellville, are situated along the U.S. Interstate 40 corridor in the southern portion of the watershed.

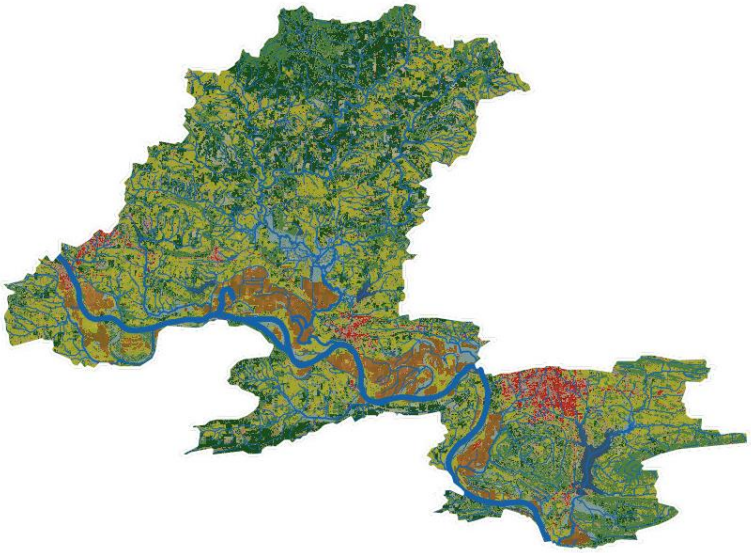

Figure 5 Land use imagery of the Lake Conway-Point Remove Watershed. (Stroud, 2023)

A significant elevation contrast is present across the watershed, as the maximum elevation is 2,007 ft. above mean sea level (MSL) and the minimum elevation is 210 ft. MSL. This is because the headwater and northernmost portion of the watershed is in the Boston Mountain Region while the lower reaches of streams are situated in the Arkansas River Valley Region.

Corresponding with the elevation contrast, hydrologic characteristics also notably vary within the watershed. The Boston Mountain Region, consisting of the Ozark National Forest, is characteristic of high-water quality. There are considerable risks that threaten water quality in this portion of the watershed which include: 1) conversion of hardwood forests to pastures, 2) confined animal operations, and 3) localized natural gas production. Although periodic, elevated turbidity levels associated with high flow regimes during storm events are observed in this portion of the basin.

Streams in the Arkansas River Valley Region flow through bottomland forests and often exhibit zero flows during summer months. During storm events, higher flows introduce contaminants from the predominately agricultural (crops and pastures) land use. Soil types in much of this portion of the basin are highly erosive and streams tend to exhibit continual, high turbidity levels.

Natural gas wells dot the landscape of much of the Lake Conway-Point Remove watershed. Natural gas production in the Fayetteville Shale area of north central Arkansas has raised numerous concerns of public health and environmental effects, including potential degradation to surface and groundwater quality. While it was not within the scope of this project to investigate potential effects of natural gas production on surface water quality, it is worth mentioning that soil disturbances from construction activities associated with natural gas production (e.g., gravel/dirt roads well pads, and pipelines) has potential to lead to increased suspended sediment loads and elevated turbidity levels in nearby streams.

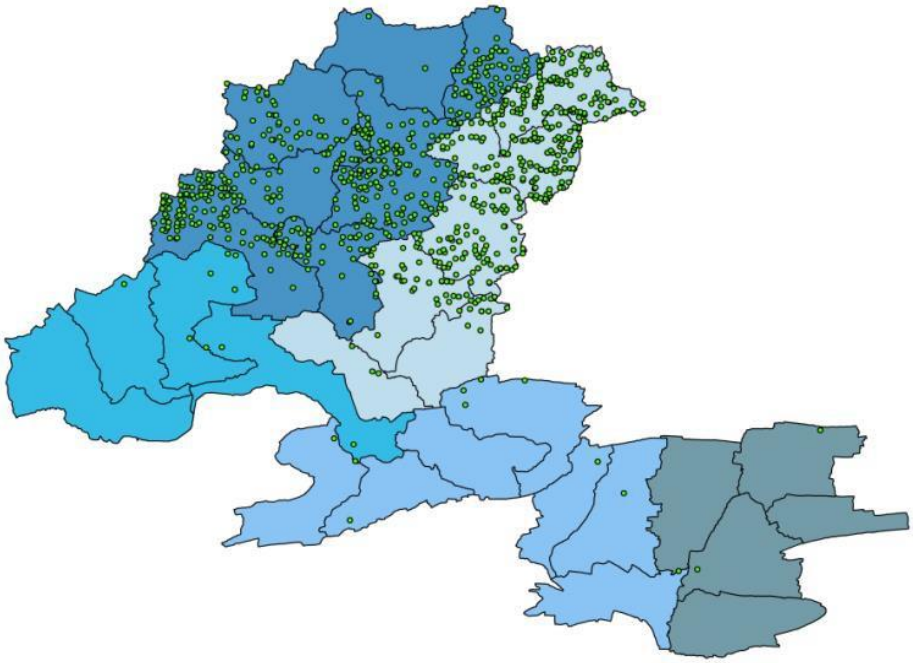

Figure 6 Locations of natural gas wells in Lake Conway Point Remove Watershed. (AWIS, 2014)

Poultry production in much of the Lake Conway-Point Remove watershed is prevalent and poses a serious threat to water quality. In addition to environmental impacts, the pollutants created from these confined animal operations pose serious human health hazards, as the feed and manure contains arsenic and ammonia and the dust affiliated with chicken houses contains microorganisms that pose certain health risks. Massive amounts of nitrogen, phosphorous, and potassium are generated by the manure from confined animal operations. When the wastes are not properly managed, these chemicals are washed away by way of surface runoff where their eventual fate is in the streams, rivers, and lakes.

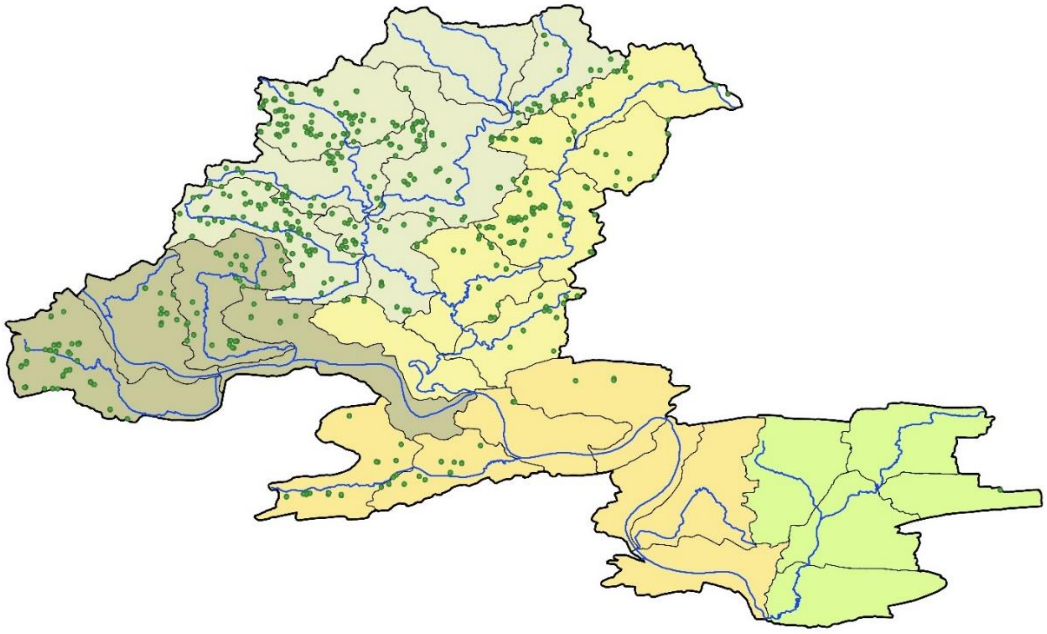

Figure 7 Locations of confined animal operations in Lake Conway Point Remove Watershed. (DTSS, 2023)

Non-point source pollution in Arkansas is dynamic and fluctuates seasonally and with river stage and flow conditions. While the Lake Conway-Point Remove watershed is listed as a priority watershed, collecting regular water quality data can provide information that is imperative to better plan and manage water resources. Through the routine analysis of water quality and quantity, the determination of constituent loads and unit area loadings on a sub-basin scope can demonstrate improvements to water quality and can indicate the level of success of conservation initiatives within the watershed.

10-Digit HUC within the Lake Conway-Point Remove Watershed

The Lake Conway-Point Remove watershed is divided into five smaller watersheds (10- digit HUCs) that include:

1) West Fork Point Remove Creek (HUC 1111020301)
2) East Fork Point Remove Creek (HUC 1111020302)
3) Galla Creek-Arkansas River (HUC 1111020303)
4) Palarm Creek (HUC 1111020304)
5) Rocky Cypress-Arkansas River (HUC 1111020305).

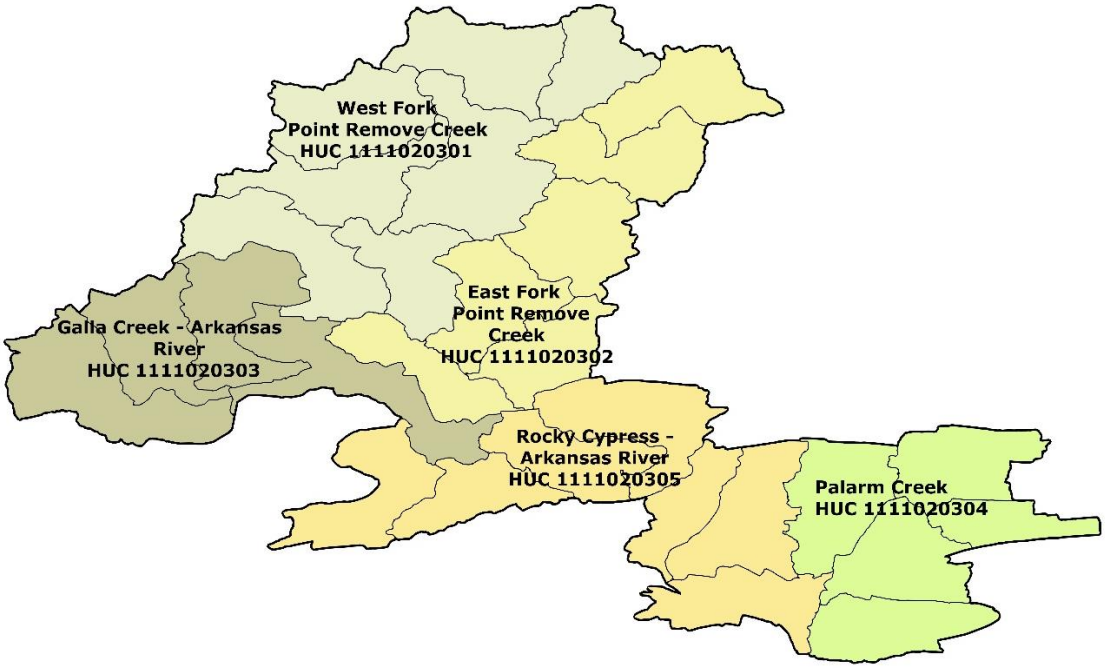

Figure 8 The Lake Conway-Point Remove Watershed's 10-digit HUCs. (DTSS, 2023)

MONITORING STATIONS

Ten monitoring stations were established throughout the Lake Conway-Point Remove watershed to quantify constituent loadings and unit area loadings based on the drainage area. Of the ten monitoring stations, six of them are in the West Fork Point Remove Creek watershed (LCC, GL, WF1, WF2, WF3, and WO); three are in the East Fork Point Remove Creek (EF1, EF2, and PR); and one station (CYP) is in the Rocky Cypress Creek- Arkansas River watershed. WF3, is the only station that had an accompanying USGS gauging station (07260673).

Table 2 Summary of the location, size, and land uses for the monitored 12-digit HUC (CAST, 2006).

Monitoring Station Name	10 - Digit HUC	12 – Digit HUC at Monitoring Station Location	12 – Digit HUC Acreage	Approximated Drainage Area	12 – Digit HUC Land Use Land Cover
CYP	Rocky Cypress Creek-Arkansas River (HUC 1111020305)	Outlet Rocky Cypress Creek (111102030502)	17,909	37,702	*Forest* – 66.2% *Pasture* – 18.7% *Crops/herbs* – 7.8% *Urban* – 6.1% *Water* – 1.1%
EF1	East Fork Point Remove Creek (HUC 1111020302)	Sunny Side- EFPR Creek (111102030202)	25,614	36,352	*Forest* – 67.2% *Pasture* – 21.9% *Crops/herbs* – 8.5% *Urban* – 1.6% *Water* – 0.6%
EF2	East Fork Point Remove Creek (HUC 1111020302)	Barns Branch- EFPR Creek (111102030204)	25,830	77,812	*Forest* – 52.5% *Pasture* – 25.1% *Crops/herbs* – 16.9% *Urban* – 3.6% *Water* – 1.8%
GL	West Fork Point Remove Creek (HUC 1111020301)	Gum Log Creek (111102030106)	32,190	21,201	*Forest* – 51.1% *Pasture* –31.4% *Crops/herbs* – 8.6% *Urban* – 8.3% *Water* – 0.3%
LCC	West Fork Point Remove Creek (HUC 1111020301)	Lower Clear Creek (111102030104)	27,076	56,138	*Forest* – 67.0% *Pasture* – 20.3% *Crops/herbs* – 10.0% *Urban* – 2.1% *Water* – 0.4%

Monitoring Station Name	10 - Digit HUC	12 – Digit HUC at Monitoring Station Location	12 – Digit HUC Acreage	Approximated Drainage Area	12 – Digit HUC Land Use Land Cover
PR	East Fork Point Remove Creek (HUC 1111020302)	Overcup Creek (111102030206)	20,054	315,300	*Forest* – 39.3% *Pasture* – 30.8% *Crops/herbs* – 9.2% *Urban* – 15.8% *Water* – 4.7%
WF1	West Fork Point Remove Creek (HUC 1111020301)	Trimble Creek-WFPR Creek (111102030102)	19,292	18,390	*Forest* – 76.9% *Pasture* – 12.1% *Crops/herbs* – 8.5% *Urban* – 1.5% *Water* – 0.8%
WF2	West Fork Point Remove Creek (HUC 1111020301)	Brock Creek (111102030101)	28,008	46,930	*Forest* – 98.4% *Pasture* – 0.3% *Crops/herbs* – 0.9% *Urban* – 0.1% *Water* – 0.3%
WF3	West Fork Point Remove Creek (HUC 1111020301)	Rock Creek- WFPR Creek (111102030105)	38,982	141,842	*Forest* – 74.9% *Pasture* –12.9% *Crops/herbs* – 10.5% *Urban* – 1.0% *Water* – 0.5%
WO	West Fork Point Remove Creek (HUC 1111020301)	Gum Log Creek (111102030106)	32,190	4,589	*Forest* – 51.1% *Pasture* –31.4% *Crops/herbs* – 8.6% *Urban* – 8.3% *Water* – 0.3%

Table 2 Continued Summary of the location, size, and land uses for the monitored 12-digit HUC (CAST, 2006).

PROJECT METHODOLOGIES

The following sections detail the methods and procedures for sampling and analysis for this project.

Water Quality and Discharge Measurements

Equilibrium collected water quality data at ten monitoring stations within the Lake Conway-Point Remove watershed. Attempts were made to collect routine grab sample once a week from each sampling station throughout the course of the project. Mostly, in-situ measurements of temperature, pH, conductivity, and dissolved oxygen were taken concurrently. Routine sample collection resulted in more than 1530 grab samples and 300 QA/QC field samples being collected during the project. Laboratory analyses were conducted by Ouachita Baptist University for NH3,-N, NO_3-NO_2-N, TKN, Cl^-, SO_4, TP, TSS, and turbidity.

Equilibrium retrieved and collected stream flow data at the ten monitoring stations throughout the course of the project. USGS has a gauging station at the WF3 station, which was used to determine discharge at that station. For the remaining stations, a pressure transducer was placed in-stream to record absolute pressure. Transducers were programmed to record data at hourly intervals. Multiple atmospheric pressure transducers were positioned throughout the watershed. Coupling the data collected from instream and atmospheric pressure transducers enabled stream stage to be computed. Upon accessing the monitoring stations, as a "back-up" to the transducers data, technicians manually recorded river stage. Throughout the project period, discharge surveys were completed at flow regimes. Acoustic Doppler technologies were used to collect stream velocities via a *Sontek* Flow Tracker® and RiverSurveyor M9®Doppler Profiler. Models of stage discharge rating curves produced graphs of discharge on the Y-axis versus stage on the X-axis, which were used to estimate streamflow.

Data Analysis

Excluding WF3, at each monitoring station surveyed discharge values were plotted with stage values to characterize flow as a function of stage. The software package Statgraphics, was utilized to identify best-fit regression analyses, that developed equations which were applied to continuous stage data for the estimation of discharge throughout the project period.

Discharge estimations were combined with the water quality concentration data for the conversion into constituent loads. A period-weighted method was utilized in estimating loading values, the parameter concentration for an individual water sample was assumed constant for the time between sample collections. Loadings were quantified for the monitoring stations and reported as monthly and annual loads. For samples with concentrations less than the laboratory's minimal reportable detection limits one half of the detection limit was used. (Tischler, 2002)

Trend analysis for parameter concentrations were conducted by using the Mann-Kendall Statistical Test. The test evaluates whether "y" values tend to increase or decrease over time through what is essentially a nonparametric form of monontonic trend regression analysis. (EPA, 2022) For samples with concentrations less than the laboratory's minimal reportable detection limits one half of the detection limit was used. (Tischler, 2002)

Loadings were converted to unit area loads based on the drainage area upstream from the monitoring station. Unit area loads provide insight to the amount of non-point source pollution originating within a basin. A unit area load was calculated for each monitoring station.

Sample Handling and Quality Assurance

Water samples were collected at weekly intervals, grab samples were collected from bridge crossings at the mid-point of the stream. At time of sampling, the samples were split into multiple containers and preserved according to QAPP protocols.

Sample integrity was maintained for each sampling event by ensuring that samples were maintained at or below 4° Celsius. Samples followed chain of custody requirements to ensure qualified possession and acceptable holding times. In-situ meters were calibrated prior to use according to manufacturer's instructions. Chain-of-custody and calibration forms for field data were maintained by Equilibrium.

Analytical services and reporting were provided by the OBU Water Quality Laboratory.
The analytical methods employed by the laboratories for this project are listed in table below.

Parameter	Source/Method	Units	MDL	MRL
Nitrate-Nitrite Nitrogen	SM 4110B	mg/L	0.01	0.02
Ammonia Nitrogen	SM 4500-NH3 E	mg/L	0.01	0.02
Total Kjeldahl Nitrogen	SM 4500-N org D	mg/L	0.03	0.05
Total Phosphorous	SM 4500-P E	mg/L	0.007	0.01
Turbidity	SM 2130 B	NTU	0.02	0.1
Total Suspended Solids	SM2540 B	mg/L	0.5	1
Chloride	SM 4110B	mg/L	0.08	0.5
Sulfate	SM 4110B	mg/L	0.15	0.5
SM = Standard Methods for the Examination of Water and Wastewater, 23RD Edition, 2017. MDL = Minimum Detection Limit MRL = Minimum Reporting Limit				

Table 3. **Summary of laboratory methods employed to analyze all water samples.**

QA/QC samples were collected during each sampling event. A single field blank and a duplicate sample were collected during each sampling event. During the project, more than 300 QA/QC field samples were analyzed. All QA/QC samples passed threshold limits; therefore, no samples were flagged or disqualified.

RESULTS

CYP Monitoring Station

The CYP monitoring station is located on Cypress Creek, at the Hwy 113 bridge crossing (35.067258°; -92.742281°), about two-and-a-half miles southeast from the town of Oppelo, Arkansas. The CYP monitoring station is located on the south side of the Arkansas River, approximately one-and-a-half miles upstream from the confluence, back flooding was not observed during this project period. The water at the CYP monitoring station is derived from the Headwaters Rocky Cypress Creek HUC-12 and most of the Outlet Rocky Cypress Creek HUC-12. The approximated acreage drained upstream of the CYP monitoring station is 37,702 acres (58.9 mi^2).

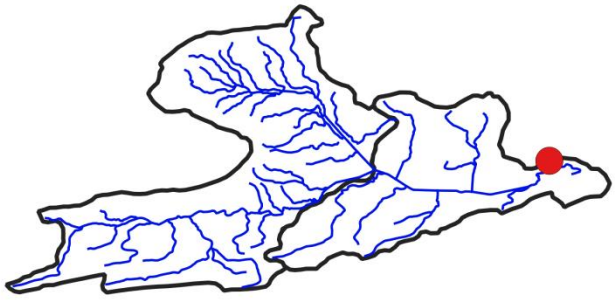

Figure 9 Receiving Waters of the CYP Monitoring Station

Sampling Period	TP (mg/L) N=153	TKN (mg/L) N=153	NH_3-N (mg/L) N=130	Turbidity (NTU) N=153	TSS (mg/L) N=153	SO_4 (mg/L) N=152	Cl^- (mg/L) N=152	NO_3+NO_2 - N (mg/L) N=140	TN (mg/L) N=152
11/05/19-10/14/20	0.13	0.69	0.07	21.6	11.7	5.32	5.24	0.19	0.88
10/15/20-10/14/21	0.14	0.69	0.05	23.8	15.2	4.34	6.26	0.15	0.85
10/15/21-10/03/22	0.12	0.65	0.04	17.5	13.7	4.12	6.16	0.18	0.80

Table 4. Annual Mean Parameter Concentrations within reportable limits at the CYP Monitoring Station

Parameter	Minimum	Maximum	Mean	Std. deviation	Kendall's tau	S	p-value (Two-tailed)
TP	0.04	0.42	0.13	0.06	-0.153	-1734	0.006
TKN	0.40	1.27	0.68	0.18	-0.106	-1225	0.053
NH_3-N	0.01	1.08	0.05	0.09	-0.186	-2024	0.001
Turbidity	3.4	120.0	21.0	12.7	-0.235	-2733	<0.0001
TSS	2.0	79.0	13.5	11.7	0.109	1243	0.050
SO_4	0.80	12.50	4.59	2.28	-0.280	-3186	<0.0001
Cl^-	1.80	12.80	5.88	2.18	-0.014	-155	0.806
NO_3+NO_2-N	0.01	0.44	0.16	0.11	-0.109	-1230	0.050
TN	0.49	1.54	0.84	0.20	-0.139	-1579	0.012

Positive S-values indicate trends are increasing, negative S-values indicate trends are decreasing.
If the p-value is less than 0.05 (the alpha value), there is a significant trend in the data set.

Table 5 Mann-Kendall Statistical Test for Trend Analysis of Parameter Concentration at the CYP Monitoring Station during the Project Period.

Stage, Discharge, and Parameter Loads at CYP

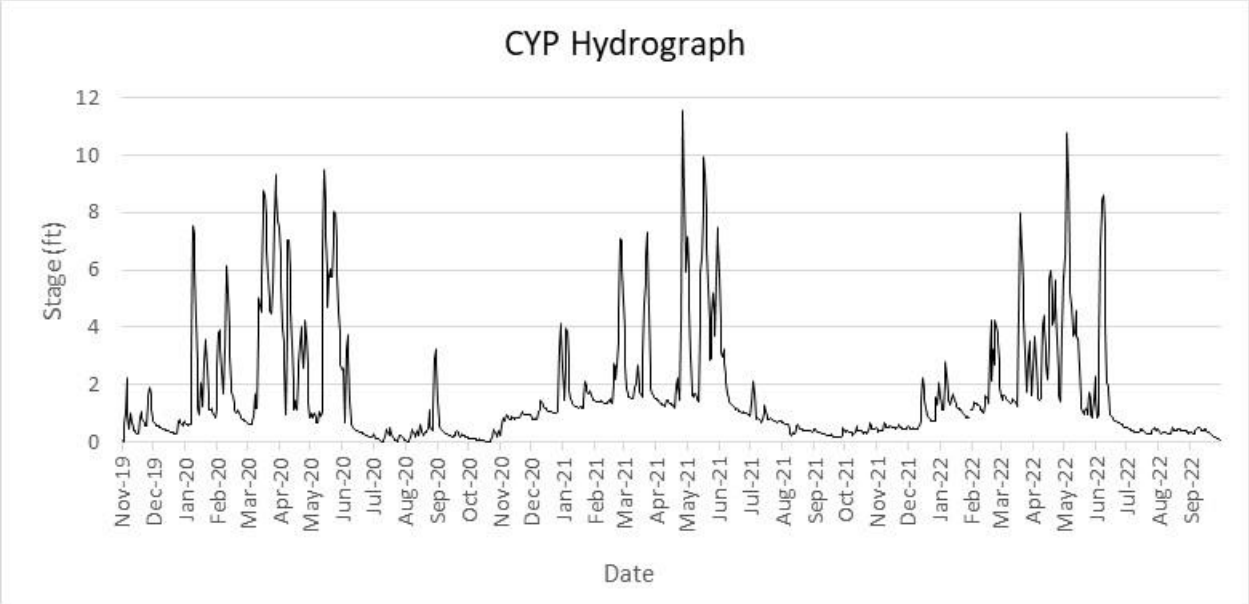

Figure 10. Daily Average Stage for the Project Period at the CYP Monitoring Station

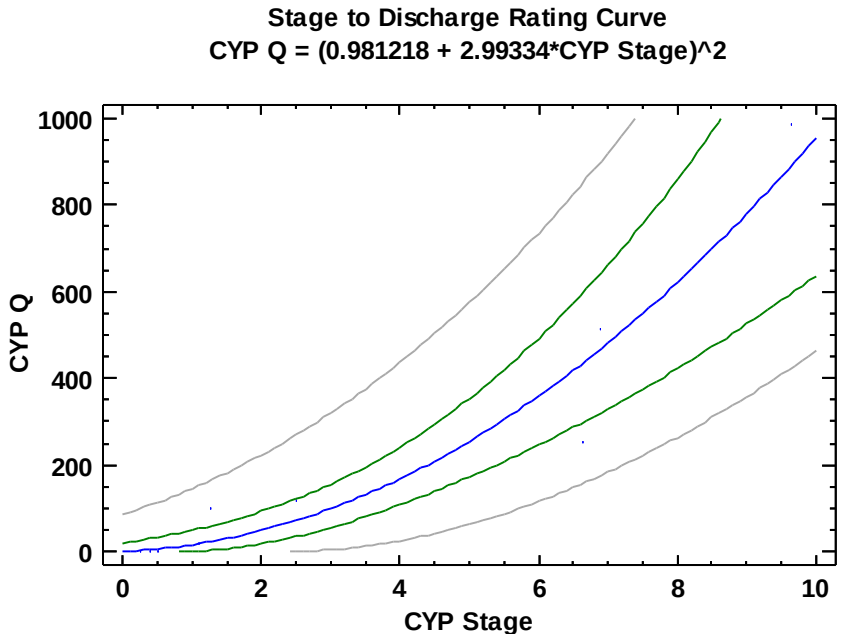

Figure 11. Stage Rating Curve and Regression Equation for the CYP Monitoring Station

Source	Sum of Squares	Mean Square	F-Ratio	P-Value
Model	890.907	890.907	88.32	0.0000
Residual	70.6081	10.0869		
Total (Corr.)	961.515			

Table 6. Stage Rating Curve Analysis of Variance for the CYP Monitoring Station.

Trend Analysis of Monthly Loading at CYP

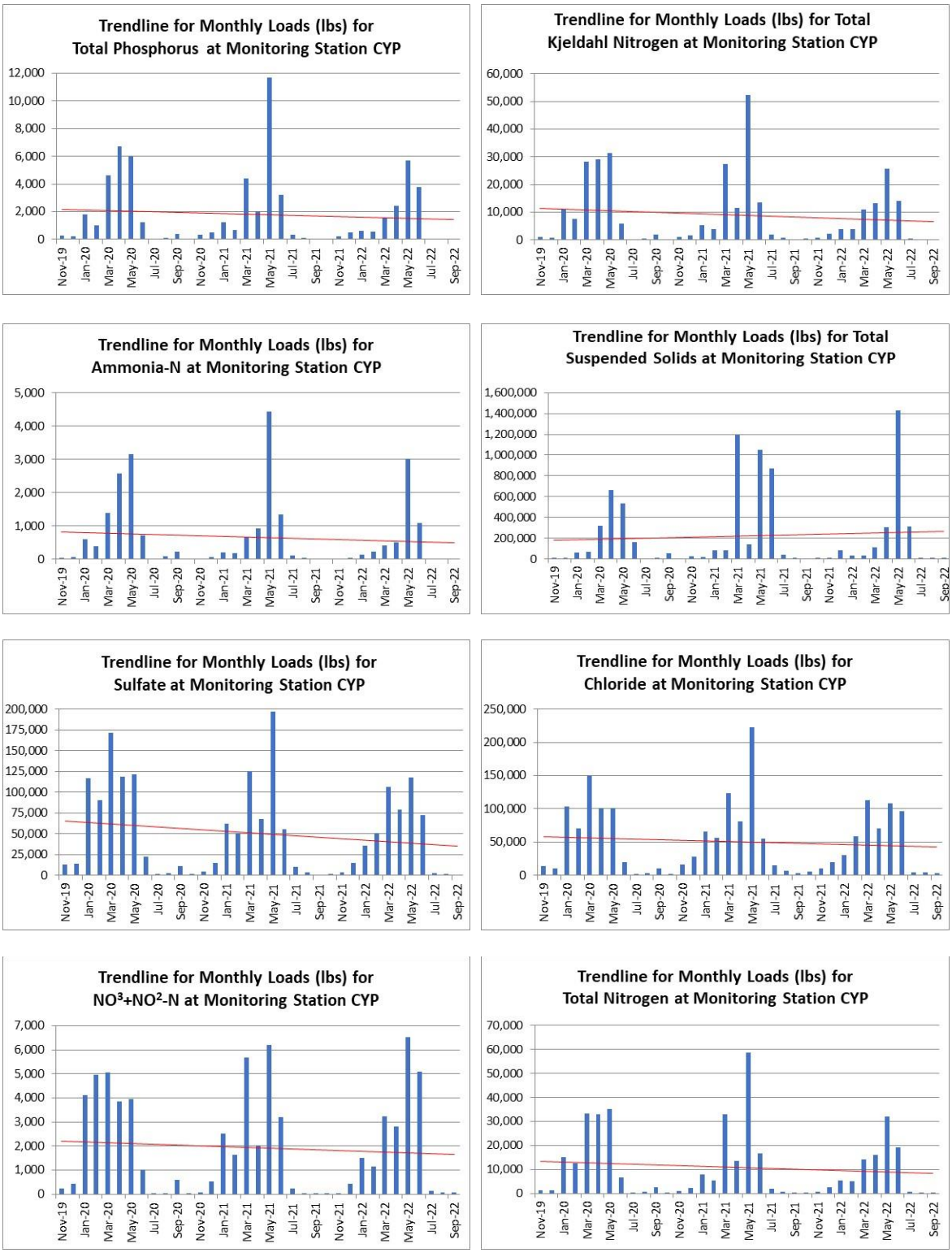

Figure 12. Trend lines for Monthly Loads at the CYP Monitoring Station

Annual Parameter Loadings at CYP

Sampling Period	Annual Discharge (Cubic Feet)	TP (lbs)	TKN (lbs)	NH_3-N (lbs)	TSS (lbs)	SO_4 (lbs)	Cl^- (lbs)	NO_3+NO_2 - N (lbs)	TN (lbs)
11/05/19-10/14/20	2.48E+09	2.24E+04	1.18E+05	9.29E+03	1.90E+06	6.82E+05	5.86E+05	2.43E+04	1.42E+05
10/15/20-10/14/21	2.12E+09	2.47E+04	1.20E+05	8.07E+03	3.54E+06	5.94E+05	6.74E+05	2.22E+04	1.42E+05
10/15/21-10/03/22	1.81E+09	1.55E+04	7.62E+04	5.52E+03	2.36E+06	4.87E+05	5.22E+05	2.10E+04	9.72E+04
Project Total	**6.42E+09**	**6.26E+04**	**3.14E+05**	**2.29E+04**	**7.80E+06**	**1.76E+06**	**1.78E+06**	**6.75E+04**	**3.81E+05**

Table 7. Annual Discharge and Loading Estimations at the CYP Monitoring Station.

Unit Area Loads at CYP

Sampling Period	TP (lbs/acre)	TKN (lbs/acre)	NH_3-N (lbs/acre)	TSS (lbs/acre)	SO_4 (lbs/acre)	Cl^- (lbs/acre)	NO_3+NO_2 - N (lbs/acre)	TN (lbs/acre)
11/05/19-10/14/20	0.59	3.1	0.25	51	18	16	0.64	3.8
10/15/20-10/14/21	0.65	3.2	0.21	94	16	18	0.59	3.8
10/15/21-10/03/22	0.41	2.0	0.15	63	13	14	0.56	2.6
Mean	**0.55**	**2.8**	**0.20**	**69**	**16**	**16**	**0.60**	**3.4**

Table 8. Unit Area Loading Estimations at the CYP Monitoring Station.

Summary for CYP Monitoring Station

At CYP, the collection of 154 samples was attempted. The 10/3/22 sample was not collected due to drought conditions. Analytical results for NH_3-N and NO_3+NO_2-N were less than laboratory reporting limits twenty-two and twelve times, respectively.

Throughout the project period, parameter concentration data sets resulted in statistically significant negative trends (decreasing with time) for TP, NH_3-N, turbidity and SO_4. No other significant trends were identified through time for the remaining parameter concentration data sets.

At CYP, from the project's commencement, computed regression analyses for the extrapolated monthly loads resulted in negatively sloped trendlines for all analyzed parameters except TSS.

At CYP, the first year period resulted in greater discharge than the other periods and greater annual loads for NH_3-N, SO_4, NO_3+NO_2-N, and TN. The second year period resulted in the second to greatest discharge and greater annual loads for TP, TKN, TSS, and Cl^-.

EF1 Monitoring Station

The EF-1 monitoring station is on the East Fork Point Remove Creek at the Hwy 124 bridge crossing (35.396482°; -92.659116°), south of the town of Lost Corner, Arkansas. EF-1 is located in the Sunny Side Creek HUC-12, approximately one quarter-mile downstream from the outlet of the Mountain View HUC-12. In this headwaters section, the East Fork Point Remove Creek is derived from a multitude of ephemeral tributaries. In addition to the entire Mountain View sub-basin, two small catchments in the northeast and northwest portion of the Sunny Side Creek sub-basin contribute water to the EF-1 monitoring station. The approximated acreage drained upstream of the EF-1 monitoring station is 36,352 acres (56.8 mi^2).

Figure 13 Receiving Waters of the EF1 Monitoring Station

Sampling Period	TP (mg/L) N=154	TKN (mg/L) N=154	NH_3-N (mg/L) N=114	Turbidity (NTU) N=154	TSS (mg/L) N=154	SO_4 (mg/L) N=153	Cl^- (mg/L) N=153	NO_3+NO_2 - N (mg/L) N=150	TN (mg/L) N=153
11/05/19-10/14/20	0.04	0.40	0.03	9.0	5.9	3.91	2.33	0.32	0.73
10/15/20-10/14/21	0.04	0.44	0.04	8.4	6.5	3.57	2.79	0.26	0.69
10/15/21-10/03/22	0.04	0.39	0.04	6.1	5.3	3.61	2.80	0.24	0.64

Table 9. Annual Mean Parameter Concentrations within reportable limits at the EF1 Monitoring Station

Parameter	Minimum	Maximum	Mean	Std. deviation	Kendall's tau	S	p-value (Two-tailed)
TP	0.02	0.12	0.04	0.02	0.008	81	0.897
TKN	0.22	0.99	0.41	0.12	0.052	607	0.343
NH_3-N	0.01	0.14	0.03	0.02	-0.003	-29	0.964
Turbidity	2.3	28.8	7.8	5.1	-0.221	-2594	<0.0001
TSS	1.0	34.0	5.9	5.0	0.082	920	0.148
SO_4	1.50	9.00	3.70	1.03	-0.248	-2833	<0.0001
Cl^-	1.50	3.80	2.64	0.49	0.219	2482	<0.0001
NO_3+NO_2-N	0.01	0.75	0.27	0.17	-0.331	-3811	<0.0001
TN	0.30	1.31	0.68	0.19	-0.274	-3156	<0.0001

Positive S-values indicate trends are increasing, negative S-values indicate trends are decreasing.

If the p-value is less than 0.05 (the alpha value), there is a significant trend in the data set.

Table 10 Mann-Kendall Statistical Test for Trend Analysis of Parameter Concentration at the EF1 Monitoring Station during the Project Period.

Stage, Discharge, and Parameter Loads at EF1

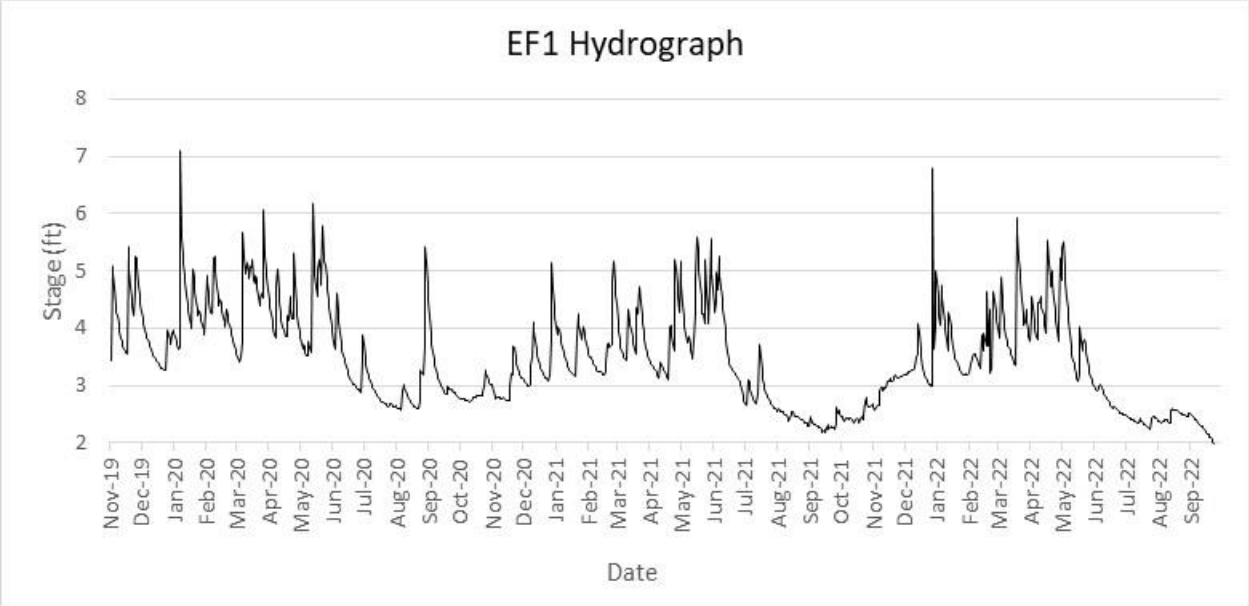

Figure 14. Daily Average Stage for the Project Period at the EF1 Monitoring Station

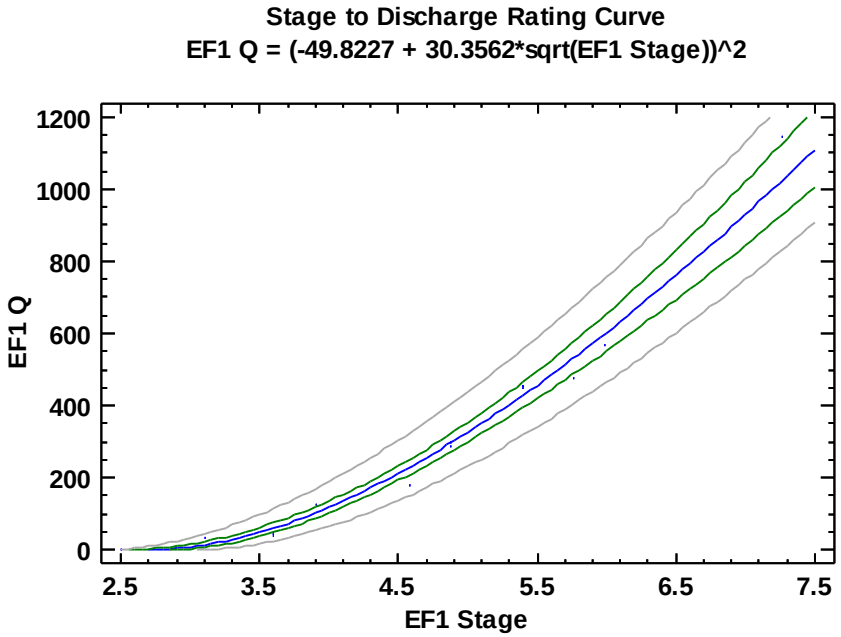

Figure 15. Stage Rating Curve and Regression Equation for the EF1 Monitoring Station

Source	Sum of Squares	Mean Square	F-Ratio	P-Value
Model	1195.67	1195.67	717.26	0.0000
Residual	23.338	1.667		
Total (Corr.)	1219.01			

Table 11. Stage Rating Curve Analysis of Variance for the EF1 Monitoring Station.

Trend Analysis of Monthly Loading at EF1

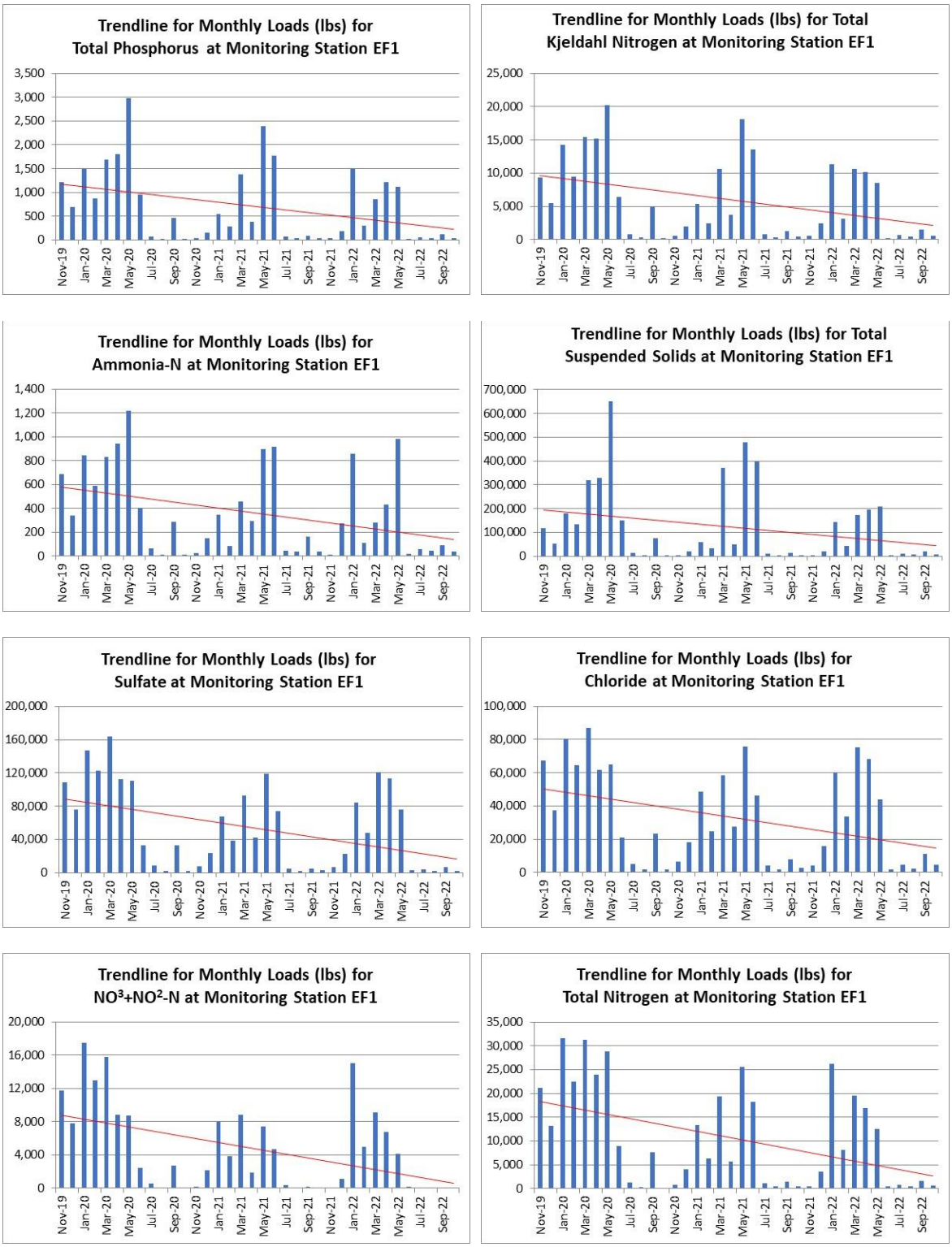

Figure 16. Trend lines for Monthly Loads for the EF1 Monitoring Station

Annual Parameter Loadings at EF1

Sampling Period	Annual Discharge (Cubic Feet)	TP (lbs)	TKN (lbs)	NH_3-N (lbs)	TSS (lbs)	SO_4 (lbs)	Cl^- (lbs)	NO_3+NO_2 - N (lbs)	TN (lbs)
11/05/19-10/14/20	3.83E+09	1.23E+04	1.02E+05	6.21E+03	2.02E+06	9.20E+05	5.14E+05	8.91E+04	1.91E+05
10/15/20-10/14/21	2.02E+09	7.19E+03	5.91E+04	3.43E+03	1.44E+06	4.80E+05	3.23E+05	3.76E+04	9.67E+04
10/15/21-10/03/22	2.07E+09	5.49E+03	5.01E+04	3.22E+03	8.33E+05	4.92E+05	3.26E+05	4.16E+04	9.17E+04
Project Total	**7.93E+09**	**2.50E+04**	**2.11E+05**	**1.29E+04**	**4.29E+06**	**1.89E+06**	**1.16E+06**	**1.68E+05**	**3.79E+05**

Table 12. Annual Discharge and Loading Estimations at the EF1 Monitoring Station.

Unit Area Loads at EF1

Sampling Period	TP (lbs/acre)	TKN (lbs/acre)	NH_3-N (lbs/acre)	TSS (lbs/acre)	SO_4 (lbs/acre)	Cl^- (lbs/acre)	NO_3+NO_2 - N (lbs/acre)	TN (lbs/acre)
11/05/19-10/14/20	0.34	2.8	0.17	56	25	14	2.45	5.3
10/15/20-10/14/21	0.20	1.6	0.09	40	13	9	1.04	2.7
10/15/21-10/03/22	0.15	1.4	0.09	23	14	9	1.14	2.5
Mean	**0.23**	**1.9**	**0.12**	**39**	**17**	**11**	**1.54**	**3.5**

Table 13. Unit Area Loading Estimations at the EF1 Monitoring Station.

Summary for EF1 Monitoring Station

At EF1, 154 samples were collected and analyzed. Analytical results for NH_3-N and NO_3 +NO_2-N were less than laboratory reporting limits forty and three times, respectively.

Throughout the project period, parameter concentration data sets resulted in statistically significant negative trends (decreasing with time) for turbidity, SO_4, NO_3+NO_2 -N, and TN. A statistically significant positive trend (increasing with time) was identified for the Cl^- data set. No other significant trends were identified through time for the remaining parameter concentration data sets.

At EF1, from the project's commencement, computed regression analyses for the extrapolated monthly loads resulted in negatively sloped trendlines for all analyzed parameters.

At EF1, the first year period resulted in greater discharge than the other periods and greater annual loads for all analyzed parameters.

EF2 Monitoring Station

The EF-2 monitoring station is located on the East Fork Point Remove Creek at the Hwy 95 bridge crossing (35.263406°; -92.732734°), about a one-and-a-half miles north of the town of Hickory Hill, Arkansas. EF-2 is situated in the Barns Branch sub-basin a short distance downstream from the historic Fryers Ford Bridge and approximately three river-miles downstream of the outlet of the Prairie Creek sub-basin. The Prairie Creek sub-basin is interconnected to both the Sunny Side Creek sub-basin and Mountain View sub-basin. The EF-2 monitoring station receives runoff from the entire northern half of the East Fork Point Remove Creek watershed (10-digit HUC) and is downstream of the EF1 monitoring station. The approximated acreage drained upstream of the EF-2 monitoring station is 77,812 acres (121.6 mi^2).

Figure 17 Receiving Waters of the EF2 Monitoring Station

Sampling Period	TP (mg/L) N=154	TKN (mg/L) N=154	NH_3-N (mg/L) N=127	Turbidity (NTU) N=154	TSS (mg/L) N=154	SO_4 (mg/L) N=151	Cl^- (mg/L) N=153	NO_3+NO_2 - N (mg/L) N=151	TN (mg/L) N=153
11/05/19-10/14/20	0.08	0.54	0.06	11.0	12.1	3.61	2.85	0.48	1.02
10/15/20-10/14/21	0.08	0.64	0.12	14.1	15.1	3.34	3.33	0.35	1.00
10/15/21-10/03/22	0.08	0.76	0.23	9.8	13.0	2.94	3.43	0.32	1.08

Table 14. Annual Mean Parameter Concentrations within reportable limits at the EF2 Monitoring Station

Parameter	Minimum	Maximum	Mean	Std. deviation	Kendall's tau	S	p-value (Two-tailed)
TP	0.02	0.26	0.08	0.04	0.138	1564	0.014
TKN	0.26	1.98	0.65	0.34	0.212	2480	0.000
NH_3-N	0.01	1.07	0.10	0.17	0.125	1413	0.027
Turbidity	3.0	110.0	11.6	10.0	-0.024	-279	0.664
TSS	2.0	102.0	13.4	12.1	0.186	2140	0.001
SO_4	0.25	6.50	3.26	1.05	-0.318	-3638	<0.0001
Cl^-	2.10	5.70	3.20	0.66	0.230	2608	<0.0001
NO_3+NO_2-N	0.01	1.10	0.38	0.27	-0.347	-4007	<0.0001
TN	0.41	2.01	1.03	0.30	-0.039	-452	0.477

Positive S-values indicate trends are increasing, negative S-values indicate trends are decreasing.
If the p-value is less than 0.05 (the alpha value), there is a significant trend in the data set.

Table 15 Mann-Kendall Statistical Test for Trend Analysis of Parameter Concentration at the EF2 Monitoring Station during the Project Period.

Stage, Discharge, and Parameter Loads at EF2

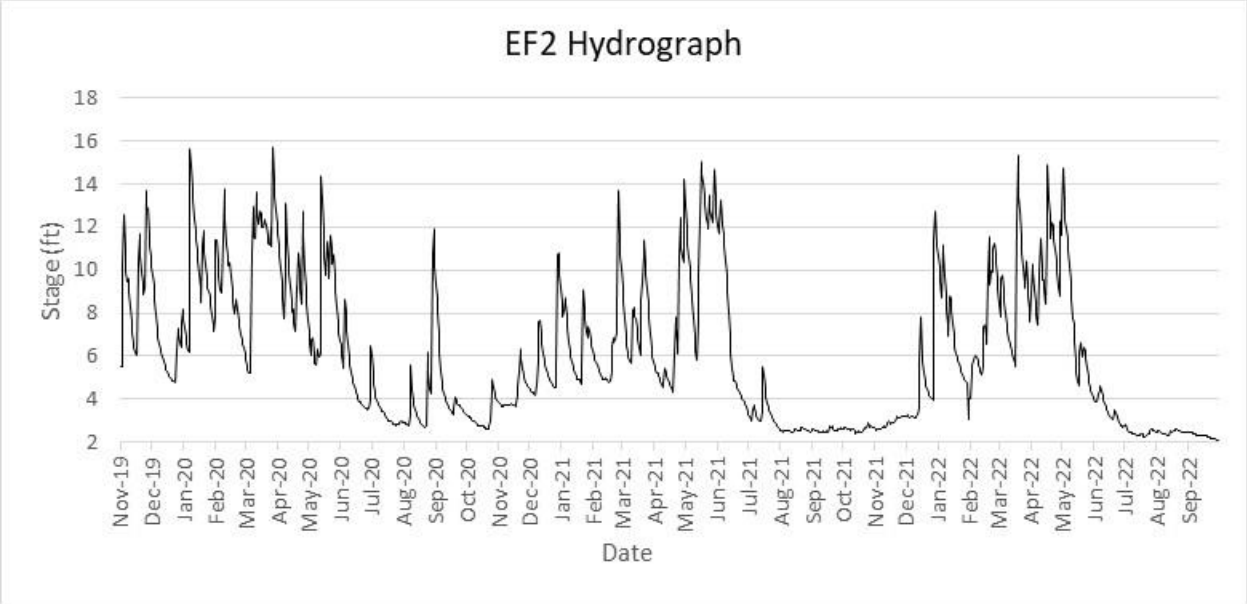

Figure 18. Daily Average Stage for the Project Period at the EF2 Monitoring Station

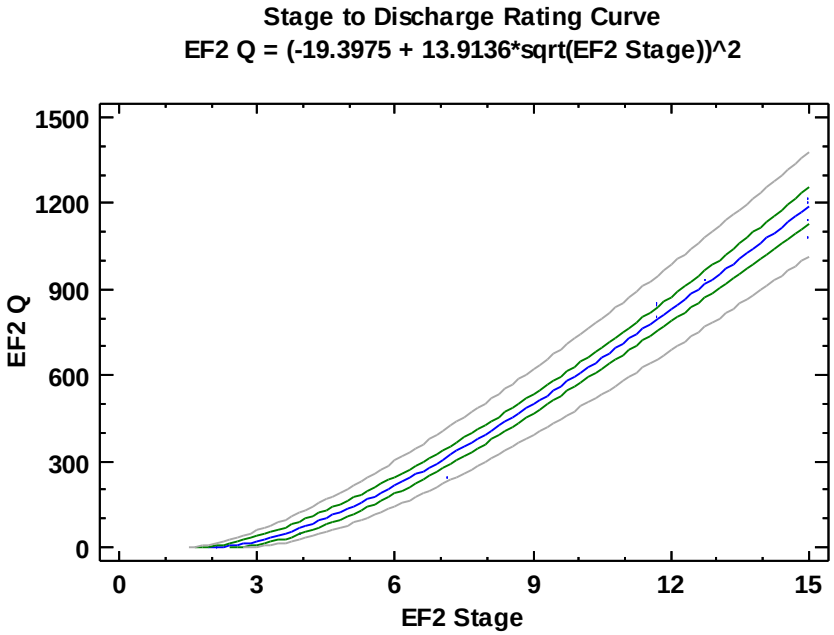

Figure 19. Stage Rating Curve and Regression Equation for the EF2 Monitoring Station

Source	Sum of Squares	Mean Square	F-Ratio	P-Value
Model	1348.37	1348.37	1097.00	0.0000
Residual	12.2914	1.22914		
Total (Corr.)	1360.66			

Table 16. Stage Rating Curve Analysis of Variance for the EF2 Monitoring Station.

Trend Analysis of Monthly Loading at EF2

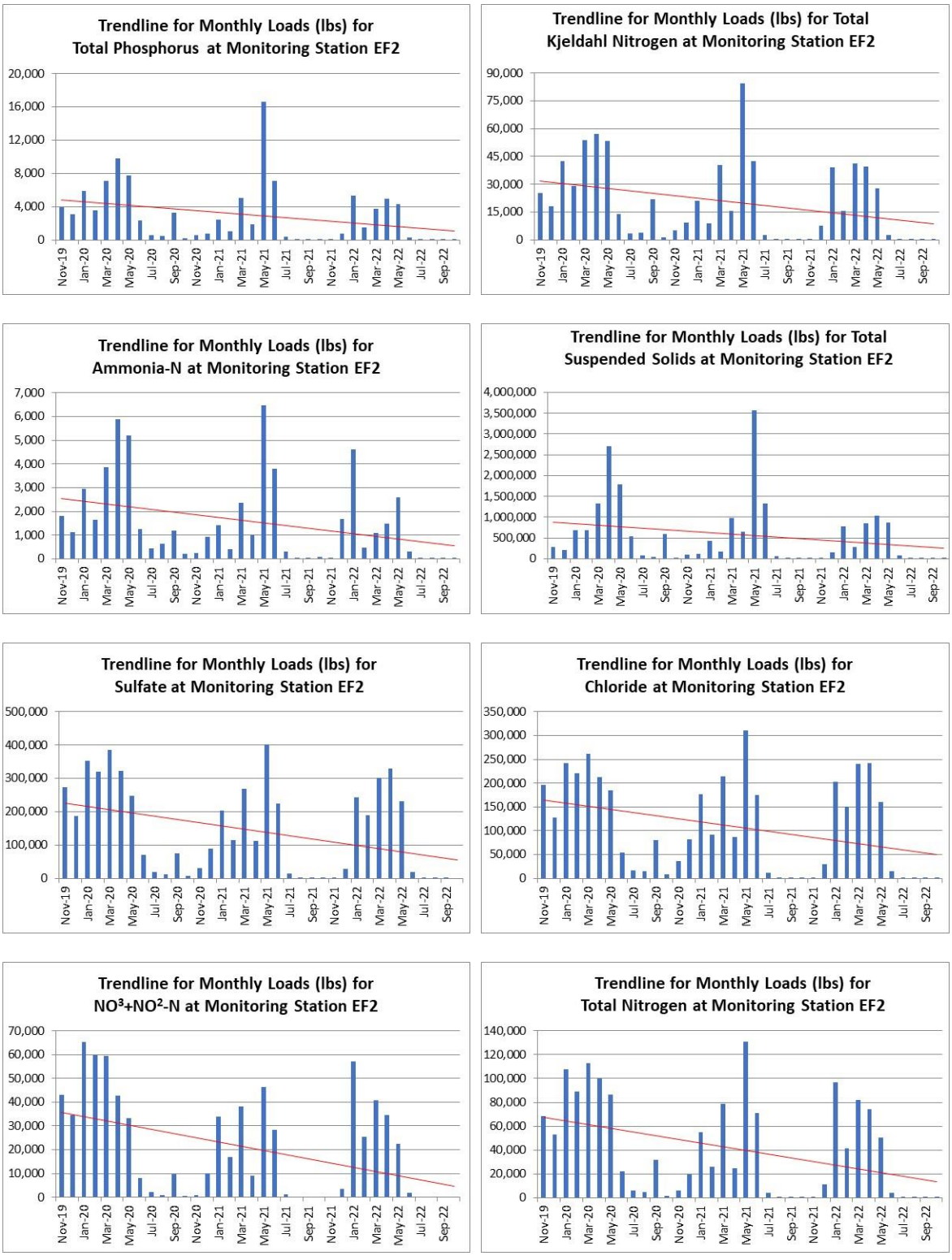

Figure 20. Trend lines for Monthly Loads for the EF2 Monitoring Station

Annual Parameter Loadings at EF2

Sampling Period	Annual Discharge (Cubic Feet)	TP (lbs)	TKN (lbs)	NH_3-N (lbs)	TSS (lbs)	SO_4 (lbs)	Cl^- (lbs)	NO_3+NO_2 - N (lbs)	TN (lbs)
11/05/19-10/14/20	9.71E+09	4.77E+04	3.22E+05	2.61E+04	8.92E+06	2.26E+06	1.62E+06	3.59E+05	6.81E+05
10/15/20-10/14/21	6.18E+09	3.58E+04	2.31E+05	1.72E+04	7.40E+06	1.46E+06	1.19E+06	1.85E+05	4.16E+05
10/15/21-10/03/22	5.69E+09	2.10E+04	1.75E+05	1.24E+04	4.06E+06	1.34E+06	1.04E+06	1.86E+05	3.60E+05
Project Total	**2.16E+10**	**1.05E+05**	**7.27E+05**	**5.56E+04**	**2.04E+07**	**5.07E+06**	**3.85E+06**	**7.30E+05**	**1.46E+06**

Table 17. Annual Discharge and Loading Estimations at the EF2 Monitoring Station.

Unit Area Loads at EF2

Sampling Period	TP (lbs/acre)	TKN (lbs/acre)	NH_3-N (lbs/acre)	TSS (lbs/acre)	SO_4 (lbs/acre)	Cl^- (lbs/acre)	NO_3+NO_2 - N (lbs/acre)	TN (lbs/acre)
11/05/19-10/14/20	0.61	4.1	0.34	115	29	21	4.62	8.8
10/15/20-10/14/21	0.46	3.0	0.22	95	19	15	2.38	5.3
10/15/21-10/03/22	0.27	2.2	0.16	52	17	13	2.39	4.6
Mean	**0.45**	**3.1**	**0.24**	**87**	**22**	**17**	**3.13**	**6.2**

Table 18. Unit Area Loading Estimations at the EF2 Monitoring Station.

Summary for EF2 Monitoring Station

At EF2, 154 samples were collected and analyzed. Analytical results for NH_3-N, SO_4, and NO_3 +NO_2-N were less than laboratory reporting limits twenty-two, two, and two times respectively.

Throughout the project period, parameter concentration data sets resulted in statistically significant negative trends (decreasing with time) for SO_4, and NO_3+NO_2 -N. Statistically significant positive trends (increasing with time) were identified for the TP, TKN, NH_3-N, TSS, and Cl^- data sets. No other significant trends were identified through time for the remaining parameter concentration data sets.

At EF2, from the project's commencement, computed regression analyses for the extrapolated monthly loads resulted in negatively sloped trendlines for all analyzed parameters.

At EF2, the first year period resulted in greater discharge than the other periods and greater annual loads for all analyzed parameters.

GL Monitoring Station

The GL monitoring station is located on Gum Log Creek at the HWY 247 bridge crossing (35.286793°; -92.911389°), about 1.6 miles southwest of the town of Economy, Arkansas. The GL monitoring station is in the Gum Log Creek 12-digit HUC. Gum Log Creek is the main drainage in the HUC12 and is a tributary to West Fork Point Remove Creek. It is composed of approximately 30 first order streams, mostly draining into the creek from the north. The southern boundary of the HUC is characterized by a steep bluff line that climbs approximately 750 ft above the creek. The GL monitoring station receives approximately 65 percent of the drainage within the HUC12. The approximated acreage drained upstream of the GL monitoring station is 21,201 acres (33.1 mi^2).

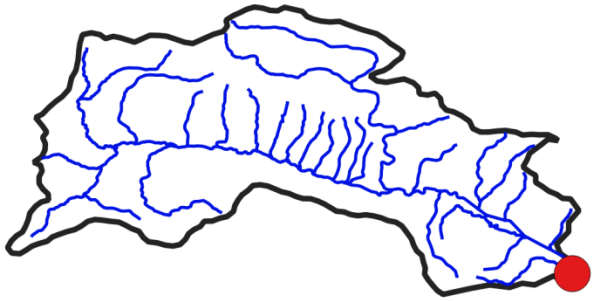

Figure 21 Receiving Waters of the GL Monitoring Station

Sampling Period	TP (mg/L) N=154	TKN (mg/L) N=154	NH_3-N (mg/L) N=132	Turbidity (NTU) N=154	TSS (mg/L) N=154	SO_4 (mg/L) N=153	Cl^- (mg/L) N=153	NO_3+NO_2-N (mg/L) N=144	TN (mg/L) N=153
11/05/19-10/14/20	0.07	0.49	0.05	15.0	14.8	11.48	3.98	0.60	1.10
10/15/20-10/14/21	0.08	0.48	0.07	15.8	14.4	9.77	4.73	0.43	0.89
10/15/21-10/03/22	0.07	0.51	0.09	16.0	13.6	8.43	4.19	0.49	0.93

Table 19. Annual Mean Parameter Concentrations within reportable limits at the GL Monitoring Station

Parameter	Minimum	Maximum	Mean	Std. deviation	Kendall's tau	S	p-value (Two-tailed)
TP	0.02	0.38	0.07	0.05	0.090	987	0.119
TKN	0.22	1.27	0.49	0.20	0.134	1563	0.015
NH_3-N	0.01	0.70	0.06	0.07	0.094	1046	0.100
Turbidity	3.7	145.0	15.6	20.8	0.014	165	0.798
TSS	2.0	203.0	14.3	28.1	0.157	1774	0.005
SO_4	0.80	43.70	9.89	5.69	-0.214	-2478	<0.0001
Cl^-	1.80	9.40	4.30	1.27	0.064	738	0.244
NO_3+NO_2-N	0.01	1.98	0.48	0.39	-0.348	-4026	<0.0001
TN	0.28	2.44	0.98	0.37	-0.295	-3415	<0.0001

Positive S-values indicate trends are increasing, negative S-values indicate trends are decreasing.
If the p-value is less than 0.05 (the alpha value), there is a significant trend in the data set.

Table 20 Mann-Kendall Statistical Test for Trend Analysis of Parameter Concentration at the GL Monitoring Station during the Project Period.

Stage, Discharge, and Parameter Loads at GL

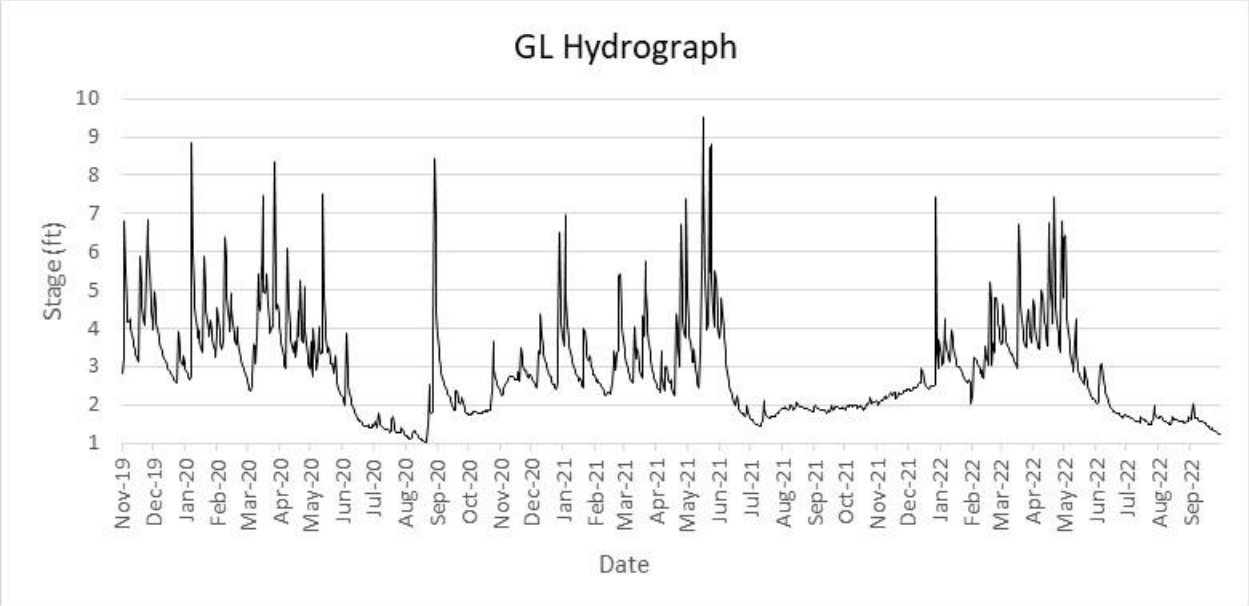

Figure 22. Daily Average Stage for the Project Period at the GL Monitoring Station

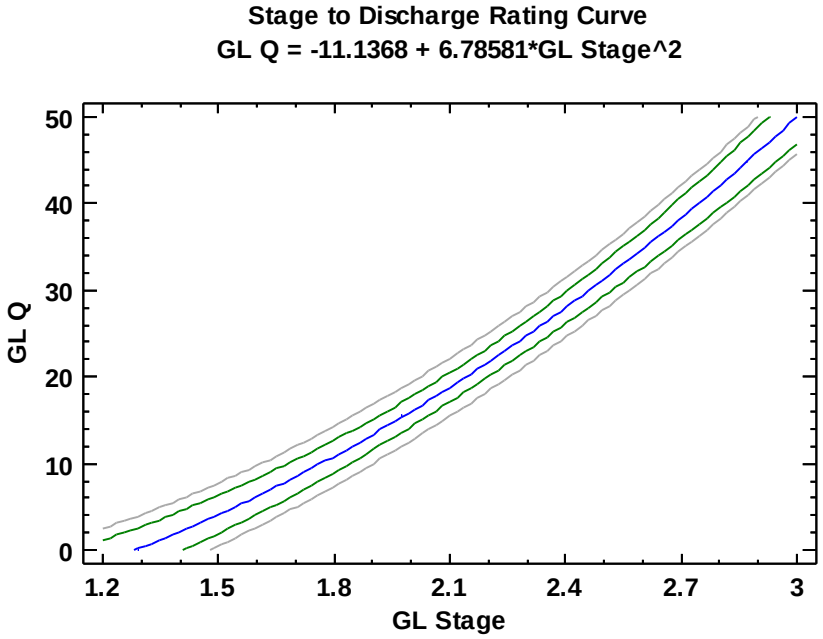

Figure 23. Stage Rating Curve and Regression Equation for the GL Monitoring Station

Source	Sum of Squares	Df	Mean Square	F-Ratio	P-Value
Model	1029.89	1	1029.89	19866.31	0.0045
Residual	0.0518411	1	0.051741		
Total (Corr.)	1029.94	2			

Table 21. Stage Rating Curve Analysis of Variance for the GL Monitoring Station.

Trend Analysis of Monthly Loading at GL

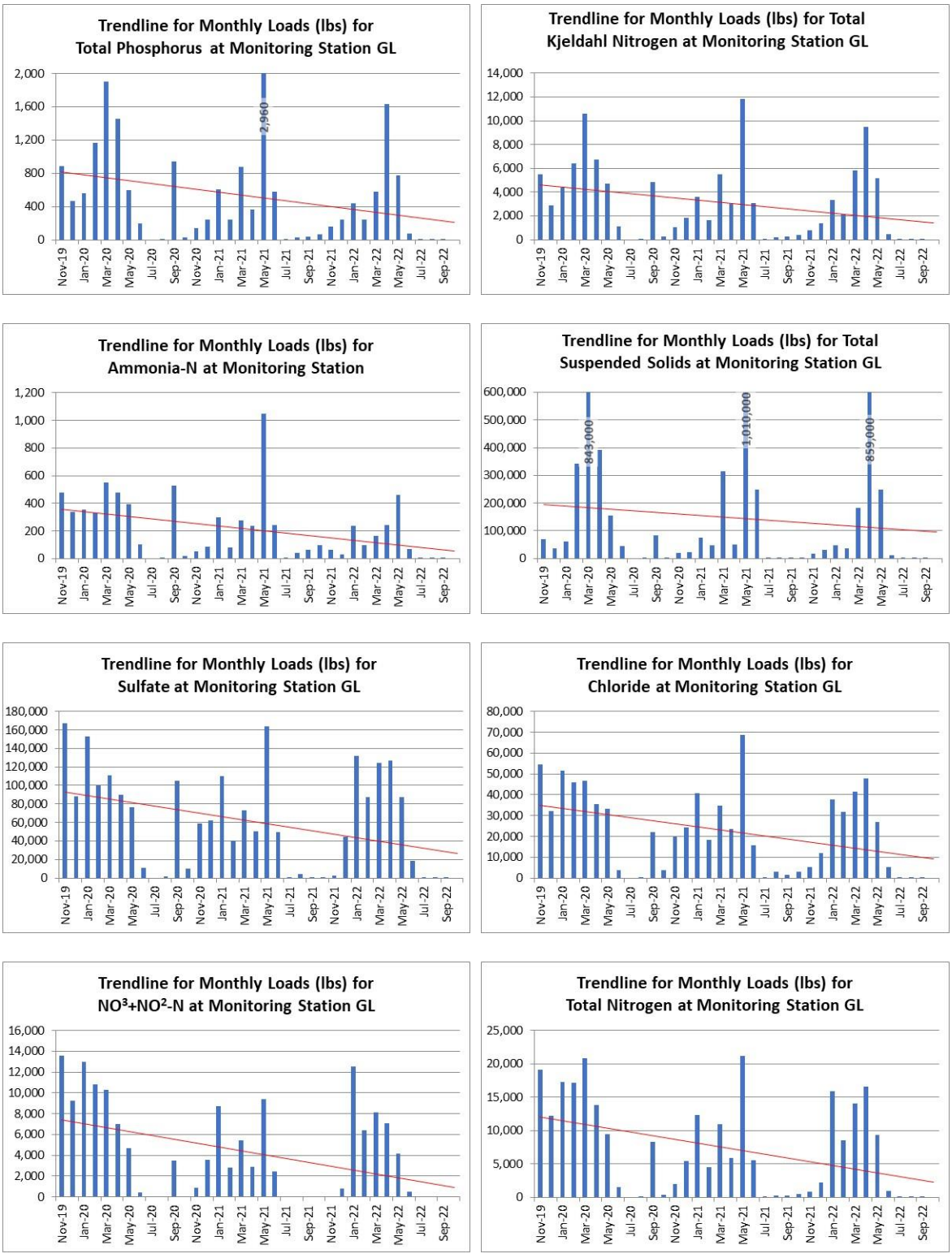

Figure 24. Trend lines for Monthly Loads for the GL Monitoring Station

Annual Parameter Loadings at GL

Sampling Period	Annual Discharge (Cubic Feet)	TP (lbs)	TKN (lbs)	NH_3-N (lbs)	TSS (lbs)	SO_4 (lbs)	Cl^- (lbs)	NO_3+NO_2 - N (lbs)	TN (lbs)
11/05/19-10/14/20	1.49E+09	8.18E+03	4.72E+04	3.58E+03	2.03E+06	9.03E+05	3.26E+05	7.26E+04	1.20E+05
10/15/20-10/14/21	1.08E+09	6.13E+03	3.24E+04	2.48E+03	1.81E+06	6.25E+05	2.56E+05	3.63E+04	6.87E+04
10/15/21-10/03/22	9.35E+08	4.20E+03	2.89E+04	1.44E+03	1.43E+06	6.25E+05	2.11E+05	3.97E+04	6.86E+04
Project Total	**3.50E+09**	**1.85E+04**	**1.09E+05**	**7.51E+03**	**5.27E+06**	**2.15E+06**	**7.93E+05**	**1.49E+05**	**2.57E+05**

Table 22. Annual Discharge and Loading Estimations at the GL Monitoring Station.

Unit Area Loads at GL

Sampling Period	TP (lbs/acre)	TKN (lbs/acre)	NH_3-N (lbs/acre)	TSS (lbs/acre)	SO_4 (lbs/acre)	Cl^- (lbs/acre)	NO_3+NO_2 - N (lbs/acre)	TN (lbs/acre)
11/05/19-10/14/20	0.39	2.2	0.17	96	43	15	3.43	5.7
10/15/20-10/14/21	0.29	1.5	0.12	85	30	12	1.71	3.2
10/15/21-10/03/22	0.20	1.4	0.07	68	30	10	1.87	3.2
Mean	**0.29**	**1.7**	**0.12**	**83**	**34**	**13**	**2.34**	**4.0**

Table 23. Unit Area Loading Estimations at the GL Monitoring Station.

Summary for GL Monitoring Station

At GL, 154 samples were collected and analyzed. Analytical results for NH_3-N and NO_3 +NO_2-N were less than laboratory reporting limits twenty-two and nine times, respectively.

Throughout the project period, parameter concentration data sets resulted in statistically significant negative trends (decreasing with time) for turbidity and SO_4, NO_3+NO_2 -N, and TN. Statistically significant positive trends (increasing with time) were identified for the TKN and TSS data sets. No other significant trends were identified through time for the remaining parameter concentration data sets.

At GL, from the project's commencement, computed regression analyses for the extrapolated monthly loads resulted in negatively sloped trendlines for all analyzed parameters.

At GL, the first year period resulted in greater discharge than the other periods and greater annual loads for all analyzed parameters.

LCC Monitoring Station

The LCC monitoring station is on Hackers Creek, which is a tributary to the West Fork Point Remove Creek. LCC is at Hackers Bridge crossing on Griffin Flat Rd. north of Hwy 247 (35.330018°; -92.869346°). The water monitored at LCC is derived from the interconnected, Upper Clear Creek and Lower Clear Creek HUC12s. The Upper Clear Creek HUC includes three main creeks flowing into Hackers Creek; Poe Creek, Anderson Creek, and Clear Creek. After Hackers Creek exits the Upper Clear Creek sub-basin and flows into the Lower Clear Creek sub- basin it picks up drainage from Isabell Creek about one river mile upstream from the LCC monitoring station. The approximate acreage drained upstream of the LCC monitoring station is 56,138 acres (87.7 mi^2).

Figure 25 Receiving Waters of the LCC Monitoring Station

Sampling Period	TP (mg/L) N=154	TKN (mg/L) N=154	NH_3-N (mg/L) N=122	Turbidity (NTU) N=154	TSS (mg/L) N=154	SO_4 (mg/L) N=153	Cl^- (mg/L) N=153	NO_3+NO_2 - N (mg/L) N=149	TN (mg/L) N=153
11/05/19-10/14/20	0.07	0.49	0.04	10.8	8.3	3.84	2.81	0.54	1.03
10/15/20-10/14/21	0.06	0.45	0.04	9.9	8.4	3.83	3.30	0.40	0.85
10/15/21-10/03/22	0.06	0.46	0.05	7.4	7.9	3.45	3.55	0.42	0.90

Table 24. Annual Mean Parameter Concentrations within reportable limits at the LCC Monitoring Station

Parameter	Minimum	Maximum	Mean	Std. deviation	Kendall's tau	S	p-value (Two-tailed)
TP	0.02	0.29	0.06	0.04	0.003	33	0.960
TKN	0.21	1.07	0.47	0.16	0.015	180	0.780
NH_3-N	0.01	0.16	0.04	0.02	0.007	72	0.910
Turbidity	1.7	42.9	9.3	7.8	-0.222	-2606	<0.0001
TSS	1.0	46.0	8.2	8.5	0.048	537	0.399
SO_4	1.10	5.90	3.70	0.85	-0.240	-2739	<0.0001
Cl^-	1.60	5.90	3.22	0.84	0.260	2972	<0.0001
NO_3+NO_2 -N	0.01	1.38	0.45	0.31	-0.340	-3930	<0.0001
TN	0.27	2.15	0.92	0.33	-0.307	-3556	<0.0001

Positive S-values indicate trends are increasing, negative S-values indicate trends are decreasing.
If the p-value is less than 0.05 (the alpha value), there is a significant trend in the data set.

Table 25 Mann-Kendall Statistical Test for Trend Analysis of Parameter Concentration at the LCC Monitoring Station during the Project Period.

Stage, Discharge, and Parameter Loads at LCC

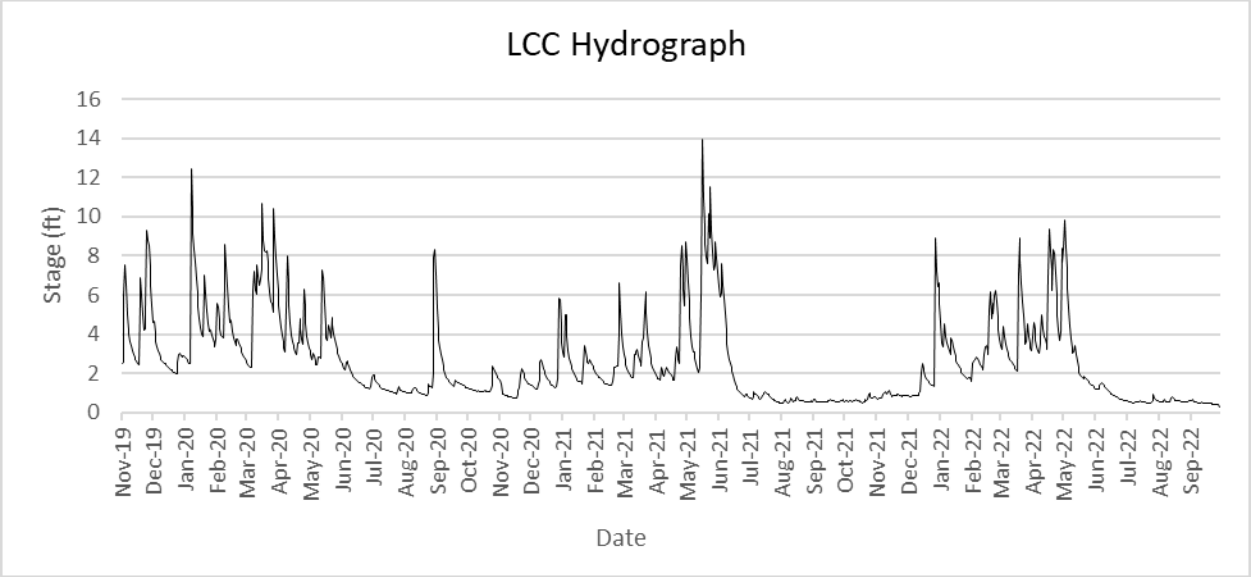

Figure 26. Daily Average Stage for the Project Period at the LCC Monitoring Station

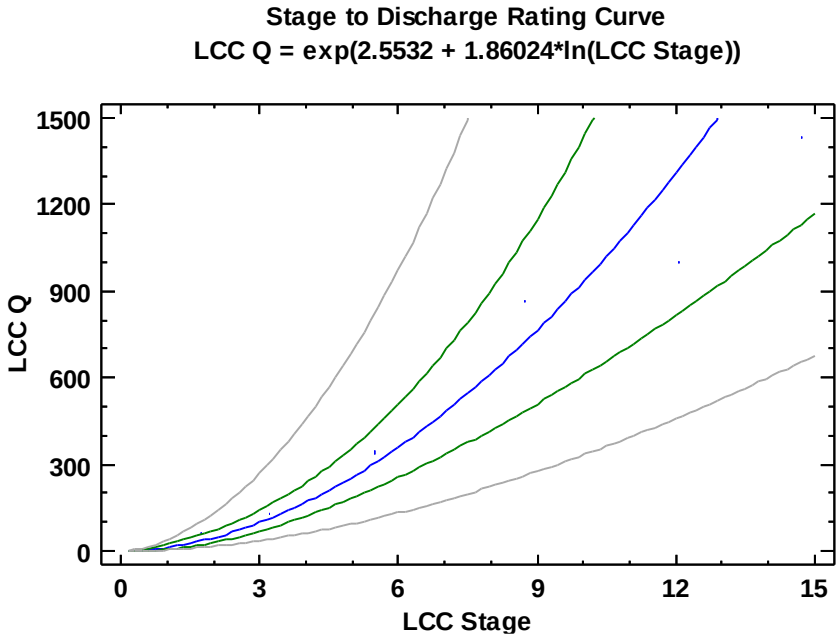

Figure 27. Stage Rating Curve and Regression Equation for the LCC Monitoring Station

Source	Sum of Squares	Mean Square	F-Ratio	P-Value
Model	25.6756	25.6756	175.60	0.0000
Residual	0.877317	0.14622		
Total (Corr.)	26.5529			

Table 26. Stage Rating Curve Analysis of Variance for the LCC Monitoring Station.

Trend Analysis of Monthly Loading at LCC

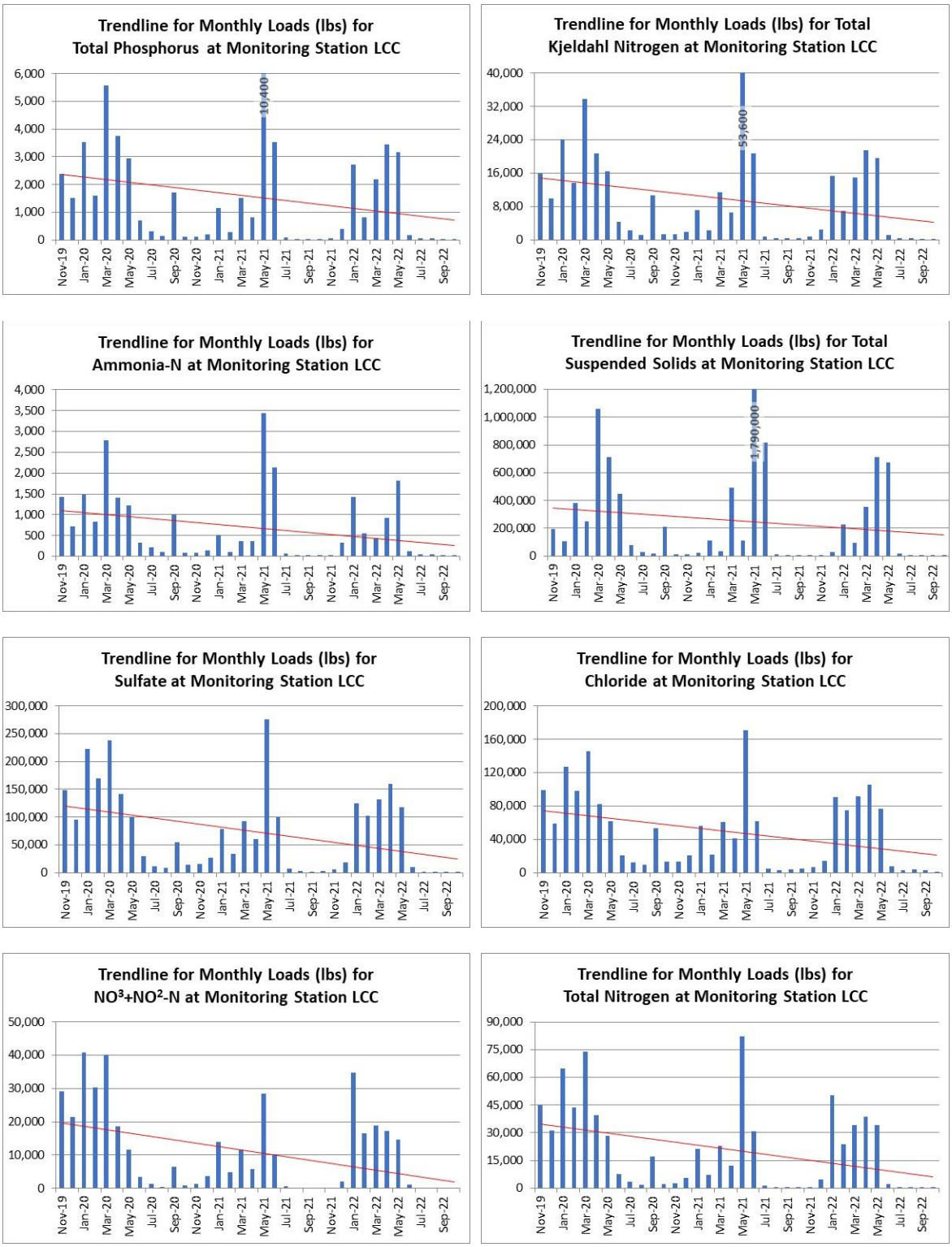

Figure 28. Trend lines for Monthly Loads for the LCC Monitoring Station

Annual Parameter Loadings at LCC

Sampling Period	Annual Discharge (Cubic Feet)	TP (lbs)	TKN (lbs)	NH_3-N (lbs)	TSS (lbs)	SO_4 (lbs)	Cl^- (lbs)	NO_3+NO_2 - N (lbs)	TN (lbs)
11/05/19-10/14/20	5.01E+09	2.42E+04	1.53E+05	1.16E+04	3.49E+06	1.22E+06	7.72E+05	2.04E+05	3.57E+05
10/15/20-10/14/21	3.05E+09	1.83E+04	1.07E+05	7.29E+03	3.41E+06	7.01E+05	4.69E+05	8.10E+04	1.88E+05
10/15/21-10/03/22	2.75E+09	1.31E+04	8.41E+04	5.75E+03	2.13E+06	6.74E+05	4.80E+05	1.05E+05	1.89E+05
Project Total	**1.08E+10**	**5.55E+04**	**3.45E+05**	**2.46E+04**	**9.04E+06**	**2.60E+06**	**1.72E+06**	**3.90E+05**	**7.35E+05**

Table 27. Annual Discharge and Loading Estimations at the LCC Monitoring Station.

Unit Area Loads at LCC

Sampling Period	TP (lbs/acre)	TKN (lbs/acre)	NH_3-N (lbs/acre)	TSS (lbs/acre)	SO_4 (lbs/acre)	Cl^- (lbs/acre)	NO_3+NO_2 - N (lbs/acre)	TN (lbs/acre)
11/05/19-10/14/20	0.43	2.7	0.21	62	22	14	3.64	6.4
10/15/20-10/14/21	0.33	1.9	0.13	61	13	8	1.44	3.4
10/15/21-10/03/22	0.23	1.5	0.10	38	12	9	1.88	3.4
Mean	**0.33**	**2.1**	**0.15**	**54**	**15**	**10**	**2.32**	**4.4**

Table 28. Unit Area Loading Estimations at the LCC Monitoring Station.

Summary for LCC Monitoring Station

At LCC, 154 samples were collected and analyzed. Analytical results for NH_3-N and NO_3 +NO_2-N were less than laboratory reporting limits twenty-two and four times, respectively.

Throughout the project period, parameter concentration data sets resulted in statistically significant negative trends (decreasing with time) for turbidity, SO_4, NO_3+NO_2 -N, and TN. A statistically significant positive trend (increasing with time) was identified for Cl^- data set. No other significant trends were identified through time for the remaining parameter concentration data sets.

At LCC, from the project's commencement, computed regression analyses for the extrapolated monthly loads resulted in negatively sloped trendlines for all analyzed parameters.

At LCC, the first year period resulted in greater discharge than the other periods and greater annual loads for all analyzed parameters.

PR Monitoring Station

The PR monitoring station is located on Point Remove Creek at the Hwy 64 bridge crossing (35.182409°; -92.784005°) just south of I-40, near the city of Morrilton, Arkansas. The PR monitoring station receives water from both the West Fork Point Remove and East Fork Point Removed 10-digit HUC, its receiving drainage area is larger than all other monitoring stations evaluated in this project. Data generated from the PR monitoring station provides a general indicator of water quality derived from the combined East and West Fork Point Remove Creek watersheds. The approximate acreage drained upstream of the PR monitoring station is 315,300 acres (492.7 mi^2).

Figure 29 Receiving Waters of the PR Monitoring Station

Sampling Period	TP (mg/L) N=154	TKN (mg/L) N=154	NH_3-N (mg/L) N=134	Turbidity (NTU) N=154	TSS (mg/L) N=154	SO_4 (mg/L) N=153	Cl^- (mg/L) N=153	NO_3+NO_2 - N (mg/L) N=150	TN (mg/L) N=153
11/05/19-10/14/20	0.09	0.65	0.06	21.3	22.2	4.76	4.39	0.33	0.99
10/15/20-10/14/21	0.10	0.64	0.06	28.4	24.5	5.24	7.17	0.26	0.90
10/15/21-10/03/22	0.09	0.70	0.10	20.7	22.5	6.11	11.35	0.28	0.99

Table 29. Annual Mean Parameter Concentrations within reportable limits at the PR Monitoring Station

Parameter	Minimum	Maximum	Mean	Std. deviation	Kendall's tau	S	p-value (Two-tailed)
TP	0.03	0.26	0.09	0.03	-0.003	-28	0.966
TKN	0.33	1.29	0.66	0.19	0.141	1654	0.010
NH_3-N	0.01	0.53	0.06	0.07	-0.039	-439	0.492
Turbidity	8.7	135.0	23.5	13.7	0.034	402	0.531
TSS	3.0	60.0	23.0	13.6	0.144	1679	0.009
SO_4	2.70	13.70	5.37	2.07	0.128	1470	0.020
Cl^-	1.70	43.50	7.64	7.71	0.304	3511	<0.0001
NO_3+NO_2 -N	0.01	0.80	0.29	0.16	-0.303	-3491	<0.0001
TN	0.49	1.58	0.95	0.21	-0.097	-1119	0.078

Positive S-values indicate trends are increasing, negative S-values indicate trends are decreasing.
If the p-value is less than 0.05 (the alpha value), there is a significant trend in the data set.

Table 30 Mann-Kendall Statistical Test for Trend Analysis of Parameter Concentration at the PR Monitoring Station during the Project Period.

Stage, Discharge, and Parameter Loads at PR

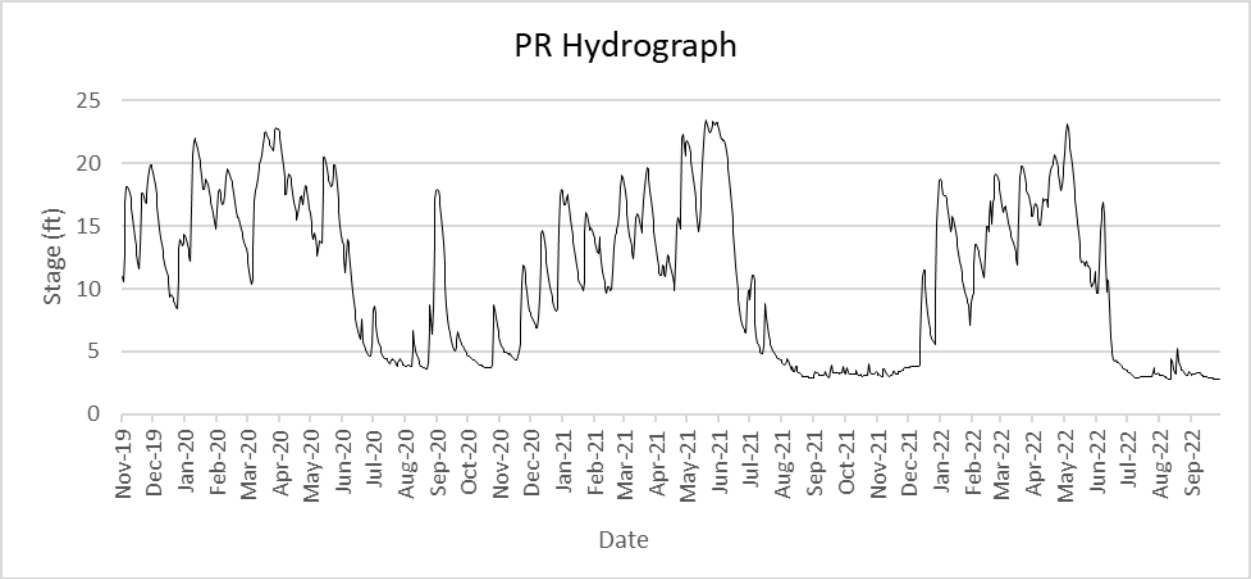

Figure 30. Daily Average Stage for the Project Period at the PR Monitoring Station

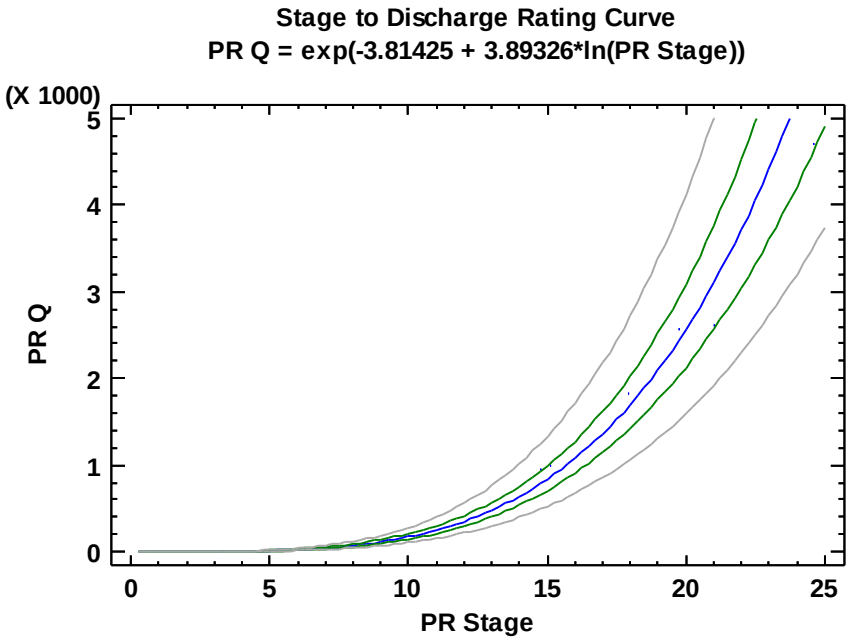

Figure 31. Stage Rating Curve and Regression Equation for the PR Monitoring Station

Source	Sum of Squares	Mean Square	F-Ratio	P-Value
Model	41.6994	41.6994	1441.49	0.0000
Residual	0.14464	0.028928		
Total (Corr.)	41.844			

Table 31. Stage Rating Curve Analysis of Variance for the PR Monitoring Station.

Trend Analysis of Monthly Loading at PR

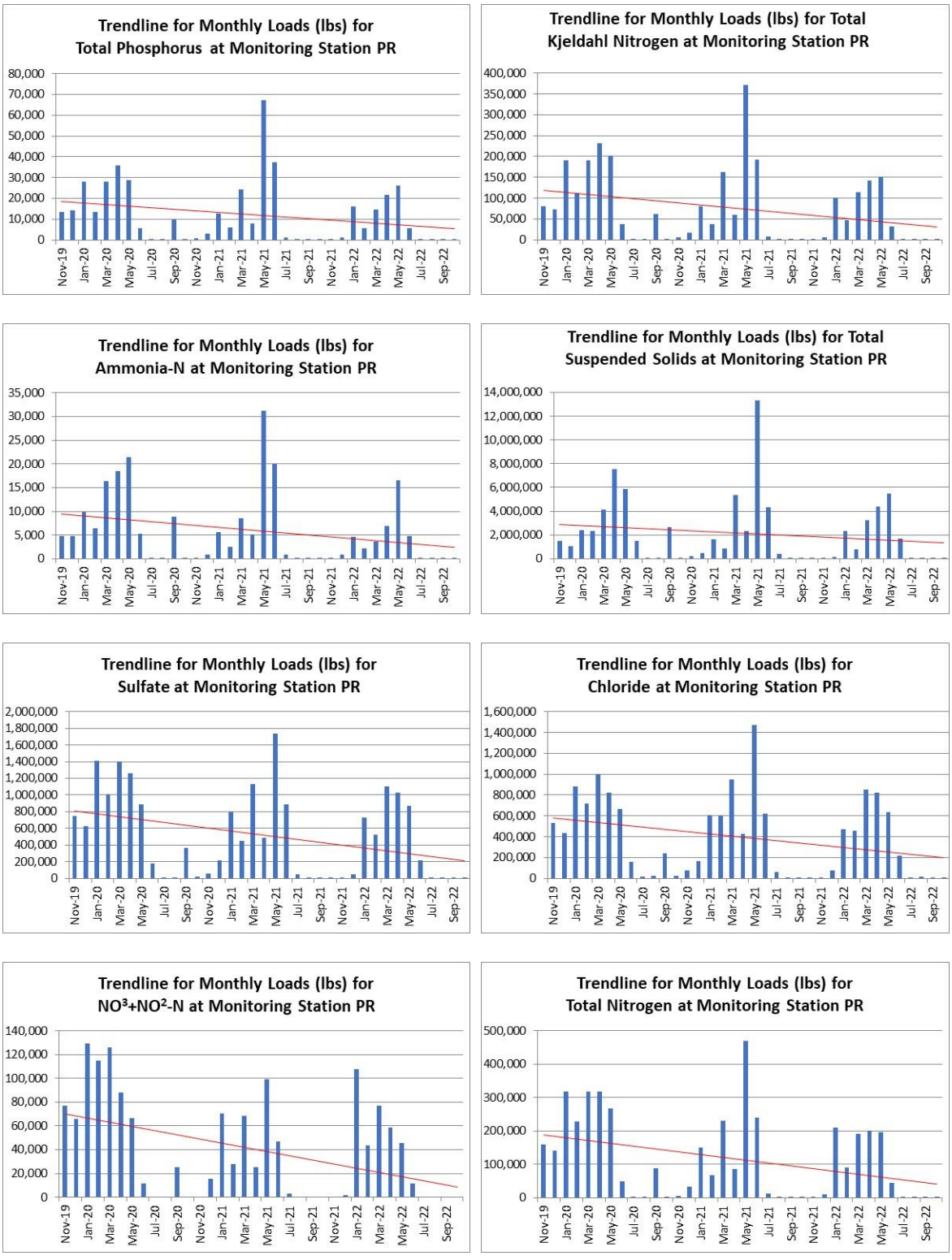

Figure 32. Trend lines for Monthly Loads for the PR Monitoring Station

Annual Parameter Loadings at PR

Sampling Period	Annual Discharge (Cubic Feet)	TP (lbs)	TKN (lbs)	NH_3-N (lbs)	TSS (lbs)	SO_4 (lbs)	Cl^- (lbs)	NO_3+NO_2 - N (lbs)	TN (lbs)
11/05/19-10/14/20	3.02E+10	1.78E+05	1.19E+06	9.68E+04	2.92E+07	7.92E+06	5.49E+06	7.06E+05	1.89E+06
10/15/20-10/14/21	2.27E+10	1.61E+05	9.37E+05	7.52E+04	2.90E+07	5.81E+06	5.01E+06	3.58E+05	1.29E+06
10/15/21-10/03/22	1.70E+10	9.10E+04	5.95E+05	3.98E+04	1.81E+07	4.53E+06	3.56E+06	3.47E+05	9.41E+05
Project Total	**6.98E+10**	**4.30E+05**	**2.72E+06**	**2.12E+05**	**7.63E+07**	**1.83E+07**	**1.41E+07**	**1.41E+06**	**4.13E+06**

Table 32. Annual Discharge and Loading Estimations at the PR Monitoring Station.

Unit Area Loads at PR

Sampling Period	TP (lbs/acre)	TKN (lbs/acre)	NH_3-N (lbs/acre)	TSS (lbs/acre)	SO_4 (lbs/acre)	Cl^- (lbs/acre)	NO_3+NO_2 - N (lbs/acre)	TN (lbs/acre)
11/05/19-10/14/20	0.56	3.8	0.31	93	25	17	2.24	6.0
10/15/20-10/14/21	0.51	3.0	0.24	92	18	16	1.13	4.1
10/15/21-10/03/22	0.29	1.9	0.13	57	14	11	1.10	3.0
Mean	**0.45**	**2.9**	**0.22**	**81**	**19**	**15**	**1.49**	**4.4**

Table 33. Unit Area Loading Estimations at the PR Monitoring Station.

Summary for PR Monitoring Station

At PR, 154 samples were collected and analyzed. Analytical results for NH_3-N and NO_3 +NO_2-N were less than laboratory reporting limits twenty and three times, respectively.

Throughout the project period, parameter concentration data set resulted in statistically a significant negative trend (decreasing with time) for NO_3+NO_2 -N. Statistically significant positive trends (increasing with time) were identified for TKN, TSS, SO_4 , and Cl^- data sets. No other significant trends were identified through time for the remaining parameter concentration data sets.

At EF1, from the project's commencement, computed regression analyses for the extrapolated monthly loads resulted in negatively sloped trendlines for all analyzed parameters.

At EF1, the first year period resulted in greater discharge than the other periods and greater annual loads for all analyzed parameters.

WF1 Monitoring Station

The WF1 monitoring station is located on the West Fork Point Remove Creek at the Pear Tree Road bridge crossing (35.447392°; -92.712737°), approximately 1.75 miles north of the town of Cleveland. WF-1 is located near the outlet of the Trimble Creek-West Fork Point Remove HUC12. The West Fork Point Remove Creek and Trimble Creek both emerge from the forested Gulf Mountain WMA within the Trimble Creek sub-basin, which borders the Ozark-St. Francis National Forest. The Trimble Creek sub-basin is an independent catchment, meaning that watercourses do not flow from an adjacent watershed. The approximate acreage drained upstream of the WF-1 monitoring station is 18,390 acres (28.7 mi^2).

Figure 33 Receiving Waters of the WF1 Monitoring Station

Sampling Period	TP (mg/L) N=153	TKN (mg/L) N=153	NH_3-N (mg/L) N=119	Turbidity (NTU) N=153	TSS (mg/L) N=153	SO_4 (mg/L) N=151	Cl^- (mg/L) N=152	NO_3+NO_2 - N (mg/L) N=150	TN (mg/L) N=152
11/05/19-10/14/20	0.04	0.42	0.04	8.6	6.1	3.22	1.51	0.19	0.61
10/15/20-10/14/21	0.04	0.44	0.04	8.0	5.6	3.15	1.72	0.15	0.58
10/15/21-10/03/22	0.05	0.50	0.10	6.4	5.6	2.78	1.76	0.13	0.62

Table 34. Annual Mean Parameter Concentrations within reportable limits at the WF1 Monitoring Station

Parameter	Minimum	Maximum	Mean	Std. deviation	Kendall's tau	S	p-value (Two-tailed)
TP	0.02	0.10	0.04	0.01	0.191	1967	0.001
TKN	0.22	1.05	0.45	0.16	0.196	2244	0.000
NH_3-N	0.01	0.41	0.04	0.06	0.071	758	0.225
Turbidity	2.4	22.1	7.7	3.6	-0.228	-2632	<0.0001
TSS	1.0	19.0	5.8	3.2	-0.033	-361	0.566
SO_4	0.25	6.10	3.03	0.92	-0.268	-3022	<0.0001
Cl^-	1.10	2.60	1.66	0.30	0.145	1588	0.011
NO_3+NO_2-N	0.01	0.38	0.16	0.09	-0.266	-3007	<0.0001
TN	0.35	1.28	0.61	0.16	0.049	551	0.381

Positive S-values indicate trends are increasing, negative S-values indicate trends are decreasing.
If the p-value is less than 0.05 (the alpha value), there is a significant trend in the data set.

Table 35 Mann-Kendall Statistical Test for Trend Analysis of Parameter Concentration at the WF1 Monitoring Station during the Project Period.

Stage, Discharge, and Parameter Loads at WF1

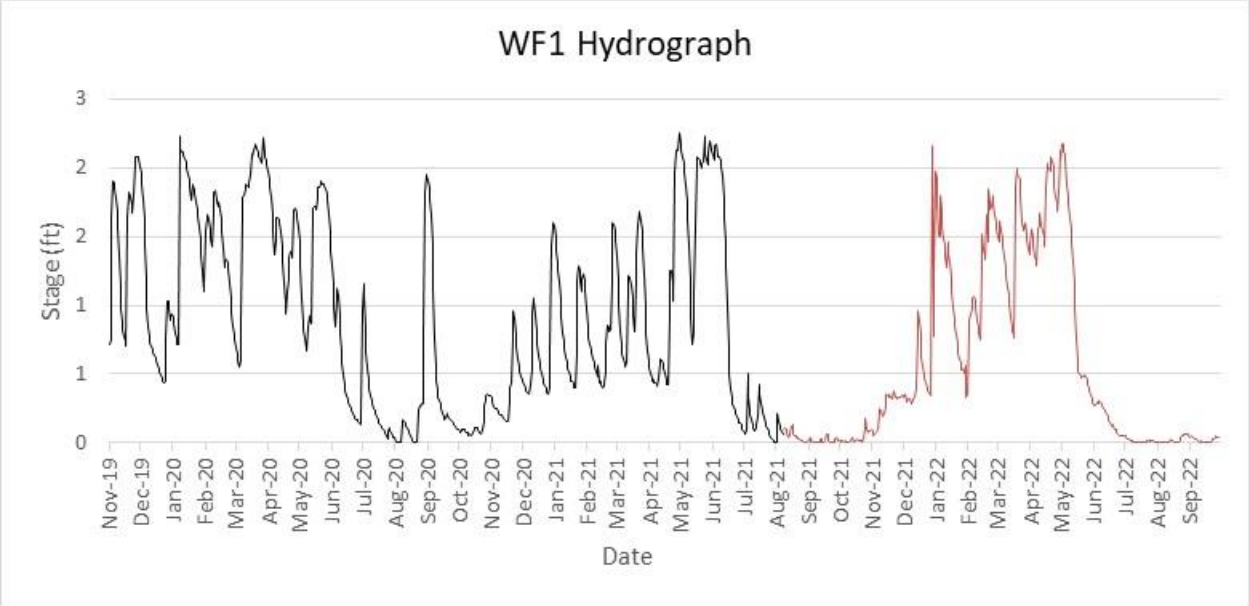

Figure 34. Daily Average Stage for the Project Period at the WF1 Monitoring Station

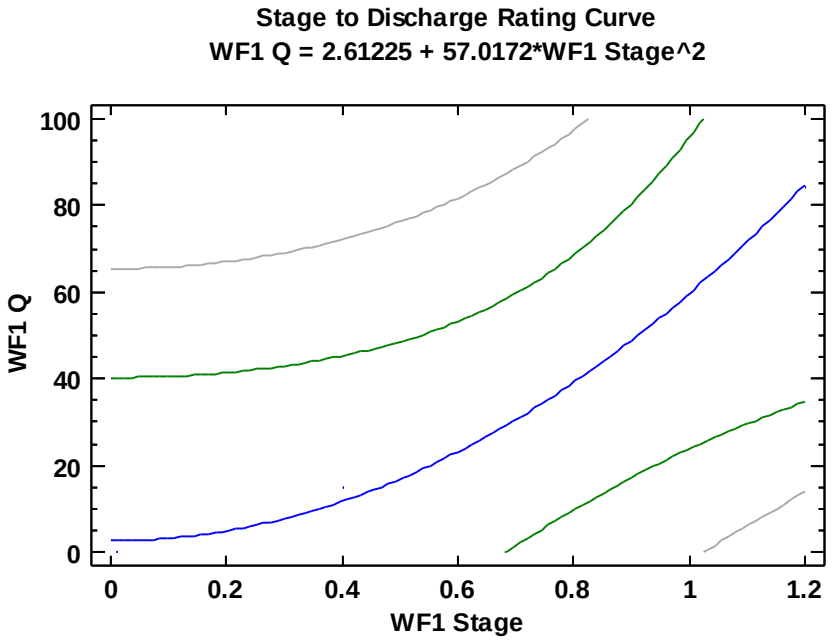

Figure 35. Stage Rating Curve and Regression Equation for the WF1 Monitoring Station

Source	Sum of Squares	Mean Square	F-Ratio	P-Value
Model	4049.92	4049.92	259.05	0.0395
Residual	15.6336	15.6336		
Total (Corr.)	4065.55			

Table 36. Stage Rating Curve Analysis of Variance for the WF1 Monitoring Station.

Trend Analysis of Monthly Loading at WF1

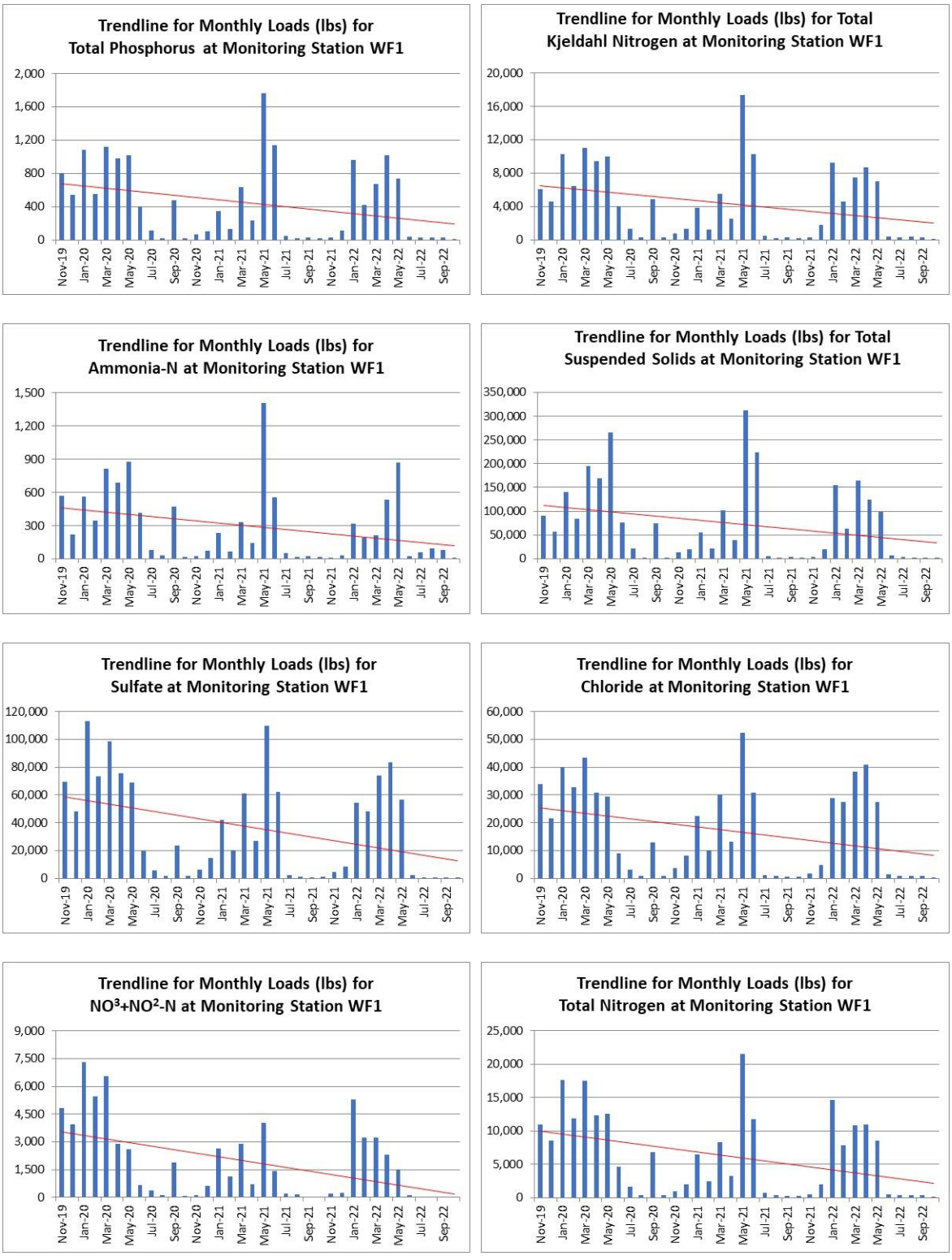

Figure 36. Trend lines for Monthly Loads for the WF1 Monitoring Station

Annual Parameter Loadings at WF1

Sampling Period	Annual Discharge (Cubic Feet)	TP (lbs)	TKN (lbs)	NH_3-N (lbs)	TSS (lbs)	SO_4 (lbs)	Cl^- (lbs)	NO_3+NO_2 - N (lbs)	TN (lbs)
11/05/19-10/14/20	2.77E+09	7.11E+03	6.84E+04	5.07E+03	1.18E+06	5.98E+05	2.58E+05	3.66E+04	1.05E+05
10/15/20-10/14/21	1.65E+09	4.53E+03	4.41E+04	2.95E+03	7.99E+05	3.49E+05	1.74E+05	1.39E+04	5.80E+04
10/15/21-10/03/22	1.64E+09	4.09E+03	4.07E+04	2.45E+03	6.44E+05	3.35E+05	1.74E+05	1.62E+04	5.69E+04
Project Total	**6.06E+09**	**1.57E+04**	**1.53E+05**	**1.05E+04**	**2.62E+06**	**1.28E+06**	**6.07E+05**	**6.66E+04**	**2.20E+05**

Table 37. Annual Discharge and Loading Estimations at the WF1 Monitoring Station.

Unit Area Loads at WF1

Sampling Period	TP (lbs/acre)	TKN (lbs/acre)	NH_3-N (lbs/acre)	TSS (lbs/acre)	SO_4 (lbs/acre)	Cl^- (lbs/acre)	NO_3+NO_2 - N (lbs/acre)	TN (lbs/acre)
11/05/19-10/14/20	0.39	3.7	0.28	64	33	14	1.99	5.7
10/15/20-10/14/21	0.25	2.4	0.16	43	19	9	0.75	3.2
10/15/21-10/03/22	0.22	2.2	0.13	35	18	9	0.88	3.1
Mean	**0.29**	**2.8**	**0.19**	**48**	**23**	**11**	**1.21**	**4.0**

Table 38. Unit Area Loading Estimations at the WF1 Monitoring Station.

Summary for WF1 Monitoring Station

At WF1, the collection of 154 samples was attempted. The 10/3/22 sample was not collected due to drought conditions. Analytical results for NH_3-N, SO_4, and NO_3+NO_2-N were less than laboratory reporting limits thirty-four, one, and two times, respectively.

Throughout the project period, parameter concentration data sets resulted in statistically significant negative trends (decreasing with time) for turbidity and SO_4, and NO_3+NO_2 -N. Statistically significant positive trends (increasing with time) were identified for TP, TKN, and Cl^- data sets. No other significant trends were identified through time for the remaining parameter concentration data sets.

At WF1, from the project's commencement, computed regression analyses for the extrapolated monthly loads resulted in negatively sloped trendlines for all analyzed parameters.

The pressure transducer that measures stage was vandalized during the final sampling year, stage was correlated to the WF2 station for this period and is depicted in red on the hydrograph.

At WF1, the first year period resulted in greater discharge than the other periods and greater annual loads for all analyzed parameters.

WF2 Monitoring Station

The WF2 monitoring station is on the West Fork Point Remove Creek in the upstream section of the Rock Creek sub-basin, immediately downstream from the outlets of the Trimble Creek and the Brock Creek sub-basins. WF-2 is located near the town of Cleveland, at the Bridge Hill Road bridge crossing (35.435140°; -92.717671°) and is 2.65 river-miles downstream from WF1. The water monitored at WF-2 is runoff derived from the Trimble Creek and the Brock Creek HUC12. The Brock Creek sub-basin is heavily forested and has minimal sources of non-point source pollution. The total acreage drained upstream of the WF2 monitoring station is 46,930 acres (73.3 mi^2).

Figure 37 Receiving Waters of the WF2 Monitoring Station

Sampling Period	TP (mg/L) N=149	TKN (mg/L) N=154	NH_3-N (mg/L) N=109	Turbidity (NTU) N=154	TSS (mg/L) N=154	SO_4 (mg/L) N=153	Cl^- (mg/L) N=153	NO_3+NO_2 - N (mg/L) N=153	TN (mg/L) N=153
11/05/19-10/14/20	0.03	0.32	0.03	10.3	5.5	2.69	1.33	0.17	0.49
10/15/20-10/14/21	0.03	0.31	0.03	11.1	6.1	2.60	1.45	0.13	0.44
10/15/21-10/03/22	0.03	0.31	0.04	6.9	5.1	2.43	1.47	0.12	0.43

Table 39. Annual Mean Parameter Concentrations within reportable limits at the WF2 Monitoring Station

Parameter	Minimum	Maximum	Mean	Std. deviation	Kendall's tau	S	p-value (Two-tailed)
TP	0.01	0.17	0.03	0.02	-0.130	-1299	0.032
TKN	0.16	0.66	0.31	0.09	-0.023	-266	0.679
NH_3-N	0.01	0.10	0.02	0.02	-0.042	-433	0.483
Turbidity	1.7	42.9	9.5	6.0	-0.245	-2876	<0.0001
TSS	1.0	28.0	5.6	3.6	0.002	19	0.977
SO_4	1.60	4.30	2.57	0.51	-0.276	-3125	<0.0001
Cl^-	1.00	2.50	1.42	0.26	0.132	1438	0.022
NO_3+NO_2-N	0.02	0.51	0.14	0.07	-0.272	-3094	<0.0001
TN	0.25	0.86	0.45	0.11	-0.155	-1779	0.005

Positive S-values indicate trends are increasing, negative S-values indicate trends are decreasing.
If the p-value is less than 0.05 (the alpha value), there is a significant trend in the data set.

Table 40 Mann-Kendall Statistical Test for Trend Analysis of Parameter Concentration at the WF2 Monitoring Station during the Project Period.

Stage, Discharge, and Parameter Loads at WF2

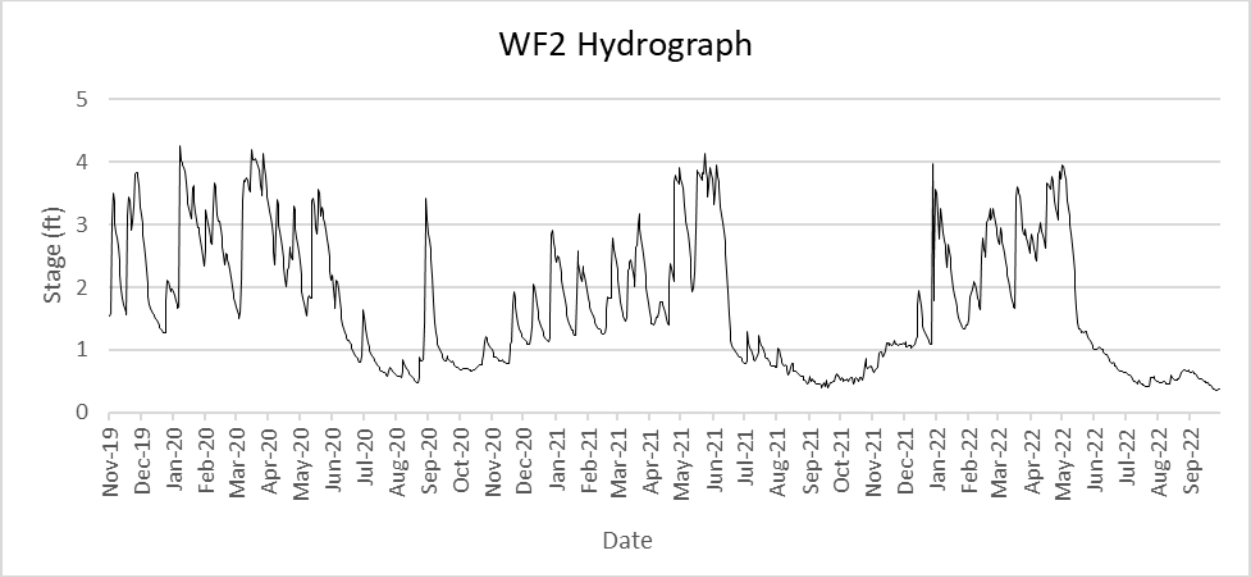

Figure 38. Daily Average Stage for the Project Period at the WF2 Monitoring Station

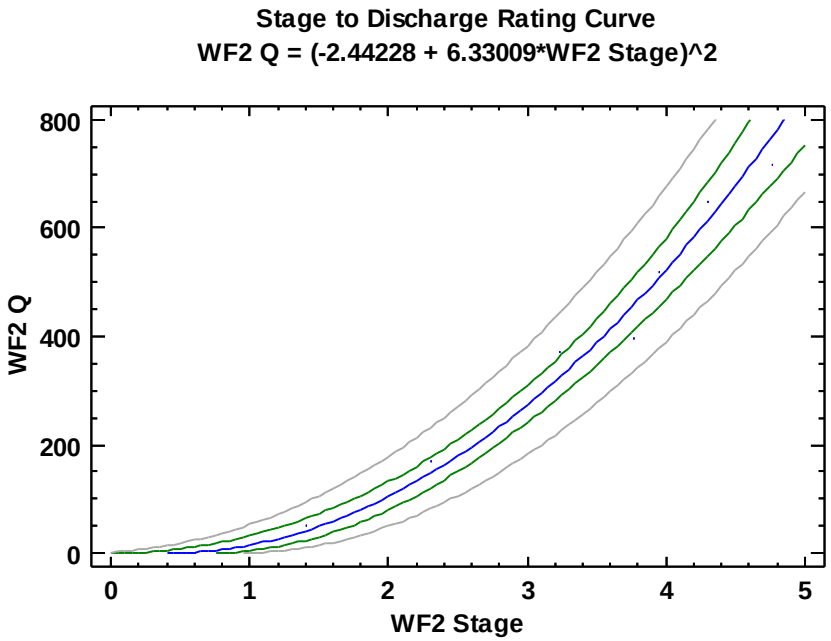

Figure 39. Stage Rating Curve and Regression Equation for the WF2 Monitoring Station

Source	Sum of Squares	Mean Square	F-Ratio	P-Value
Model	607.412	607.412	442.44	0.0000
Residual	8.23724	1.37287		
Total (Corr.)	615.649			

Table 41. Stage Rating Curve Analysis of Variance for the WF2 Monitoring Station.

Trend Analysis of Monthly Loading at WF2

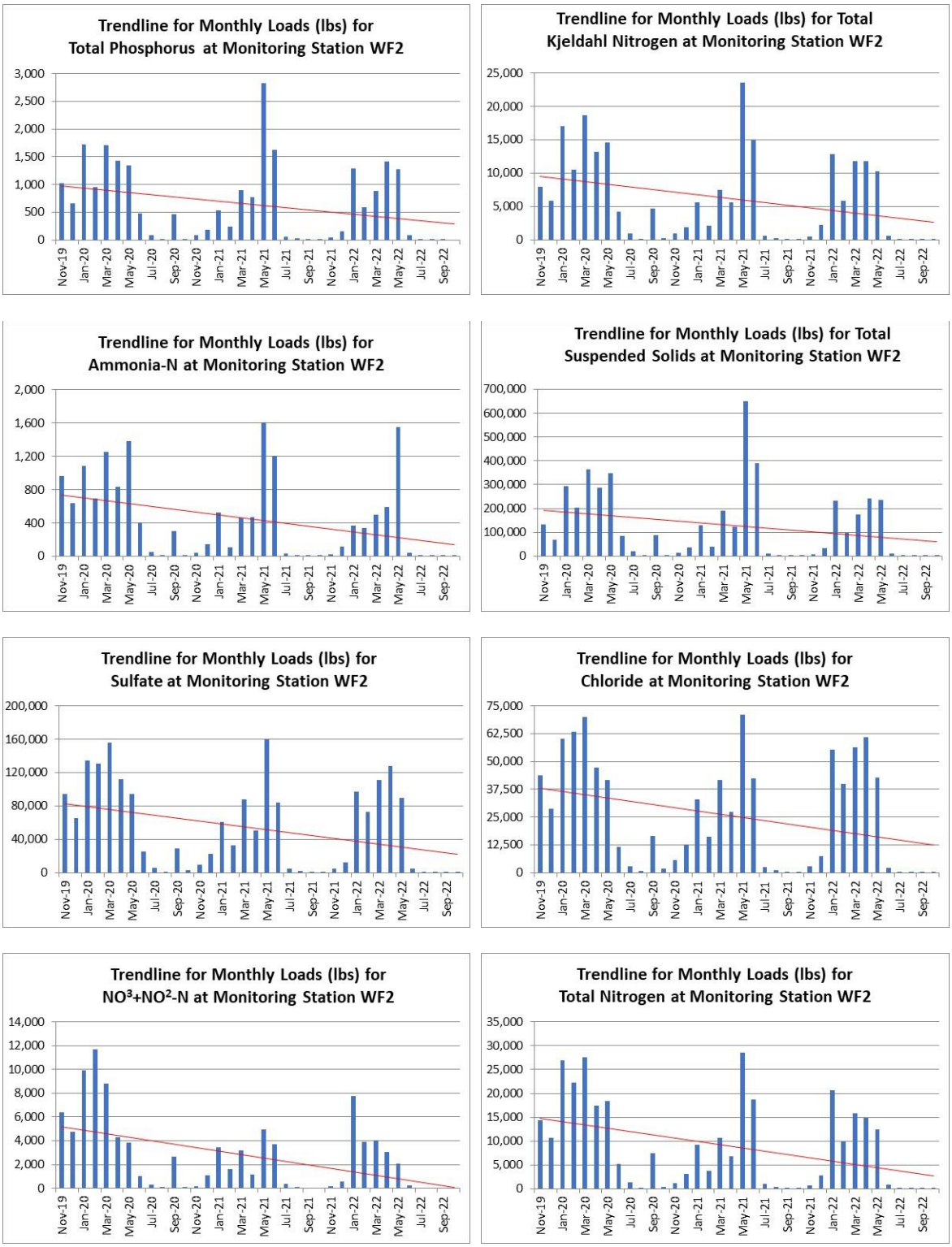

Figure 40. Trend lines for Monthly Loads for the WF2 Monitoring Station

Annual Parameter Loadings at WF2

Sampling Period	Annual Discharge (Cubic Feet)	TP (lbs)	TKN (lbs)	NH_3-N (lbs)	TSS (lbs)	SO_4 (lbs)	Cl^- (lbs)	NO_3+NO_2 - N (lbs)	TN (lbs)
11/05/19-10/14/20	4.82E+09	9.90E+03	9.79E+04	7.62E+03	1.89E+06	8.48E+05	3.88E+05	5.38E+04	1.52E+05
10/15/20-10/14/21	2.94E+09	7.24E+03	6.34E+04	4.65E+03	1.59E+06	5.16E+05	2.55E+05	1.99E+04	8.33E+04
10/15/21-10/03/22	2.90E+09	5.76E+03	5.62E+04	3.56E+03	1.04E+06	5.20E+05	2.69E+05	2.19E+04	7.81E+04
Project Total	**1.07E+10**	**2.29E+04**	**2.18E+05**	**1.58E+04**	**4.52E+06**	**1.88E+06**	**9.12E+05**	**9.56E+04**	**3.13E+05**

Table 42. Annual Discharge and Loading Estimations at the WF2 Monitoring Station.

Unit Area Loads at WF2

Sampling Period	TP (lbs/acre)	TKN (lbs/acre)	NH_3-N (lbs/acre)	TSS (lbs/acre)	SO_4 (lbs/acre)	Cl^- (lbs/acre)	NO_3+NO_2 - N (lbs/acre)	TN (lbs/acre)
11/05/19-10/14/20	0.21	2.1	0.16	40	18	8	1.15	3.2
10/15/20-10/14/21	0.15	1.4	0.10	34	11	5	0.42	1.8
10/15/21-10/03/22	0.12	1.2	0.08	22	11	6	0.47	1.7
Mean	**0.16**	**1.6**	**0.11**	**32**	**13**	**6**	**0.68**	**2.2**

Table 43. Unit Area Loading Estimations at the WF2 Monitoring Station.

Summary for WF2 Monitoring Station

At WF2, 154 samples were collected and analyzed. Analytical results for TP and NH_3-N were less than laboratory reporting limits five and forty-five times, respectively.

Throughout the project period, parameter concentration data sets resulted in statistically significant negative trends (decreasing with time) for TP, turbidity, SO_4, NO_3+NO_2 -N, and TN. A statistically significant positive trend (increasing with time) was identified for the Cl^- data set. No other significant trends were identified through time for the remaining parameter concentration data sets.

At WF2, from the project's commencement, computed regression analyses for the extrapolated monthly loads resulted in negatively sloped trendlines for all analyzed parameters.

At WF2, the first year period resulted in greater discharge than the other periods and greater annual loads for all analyzed parameters.

WF3 Monitoring Station

The WF3 monitoring station is on the West Fork Point Remove Creek and is located in the upper drainage area of Devils Fork sub-basin, near the outlets of the Lower Clear Creek and the Rock Creek HUC12. WF-3 is located at Burnett's Bridge (35.324192°; -92.872767) along Hwy 247 between the towns of Hattieville and Economy, Arkansas. The water monitored at WF3 is derived from runoff from five 12-digit HUCs: 1) Upper Clear Creek, 2) Lower Clear Creek, 3) Brock Creek, 4) Trimble Creek-West Fork Point Remove Creek, and 5) Rock Creek- West Fork Point Remove Creek. WF3 monitoring station is downstream of both WF2 and LCC. WF3 is located at the USGS Monitoring Station 07260673, where continuous stage and discharge is reported. The approximate acreage drained upstream of the WF-3 monitoring station is 141,842 acres (221.6 mi^2).

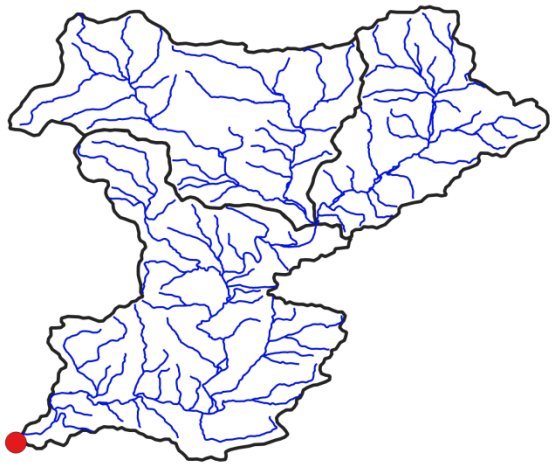

Figure 41 Receiving Waters of the WF3 Monitoring Station

Sampling Period	TP (mg/L) N=154	TKN (mg/L) N=154	NH_3-N (mg/L) N=109	Turbidity (NTU) N=154	TSS (mg/L) N=154	SO_4 (mg/L) N=153	Cl^- (mg/L) N=153	NO_3+NO_2 - N (mg/L) N=149	TN (mg/L) N=153
11/05/19-10/14/20	0.05	0.40	0.03	10.0	7.3	2.91	2.06	0.34	0.74
10/15/20-10/14/21	0.05	0.38	0.03	10.1	8.1	2.94	2.46	0.26	0.65
10/15/21-10/03/22	0.04	0.41	0.03	6.8	6.8	2.61	2.78	0.27	0.68

Table 44. Annual Mean Parameter Concentrations within reportable limits at the WF3 Monitoring Station

Parameter	Minimum	Maximum	Mean	Std. deviation	Kendall's tau	S	p-value (Two-tailed)
TP	0.02	0.15	0.05	0.02	0.063	662	0.289
TKN	0.22	0.83	0.40	0.11	0.106	1229	0.055
NH_3-N	0.01	0.11	0.03	0.01	-0.099	-1018	0.100
Turbidity	1.8	38.4	9.0	6.9	-0.202	-2372	0.000
TSS	1.0	39.0	7.4	6.3	0.081	909	0.153
SO_4	1.40	4.50	2.82	0.62	-0.267	-3032	<0.0001
Cl^-	1.30	4.80	2.43	0.77	0.238	2713	<0.0001
NO_3+NO_2 -N	0.01	0.73	0.29	0.17	-0.338	-3891	<0.0001
TN	0.29	1.36	0.68	0.19	-0.242	-2787	<0.0001

Positive S-values indicate trends are increasing, negative S-values indicate trends are decreasing.
If the p-value is less than 0.05 (the alpha value), there is a significant trend in the data set.

Table 45 Mann-Kendall Statistical Test for Trend Analysis of Parameter Concentration at the WF3 Monitoring Station during the Project Period.

Stage, Discharge, and Parameter Loads at WF3

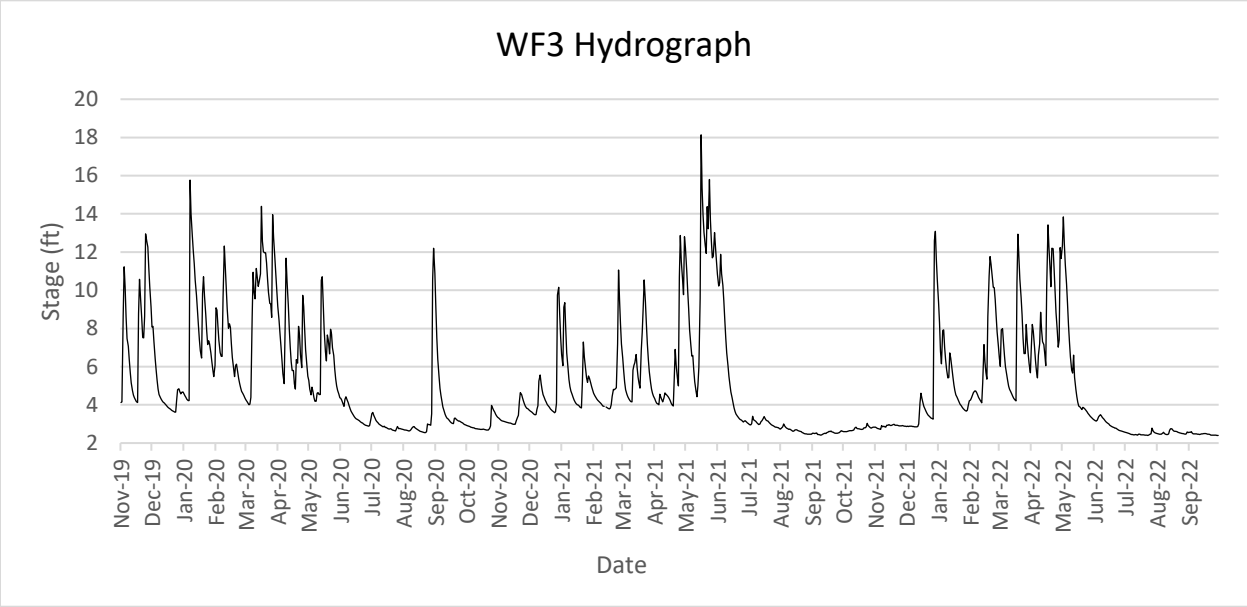

Figure 42. Daily Average Stage for the Project Period at the WF3 Monitoring Station, Source: USGS Monitoring Station 07260673

For this project, daily average discharge at the WF3 Monitoring Station was retrieved from USGS Monitoring Station 07260673 (https://waterdata.usgs.gov/monitoring-location/07260673/#parameterCode=00065&period=P7D).

Trend Analysis of Monthly Loading at WF3

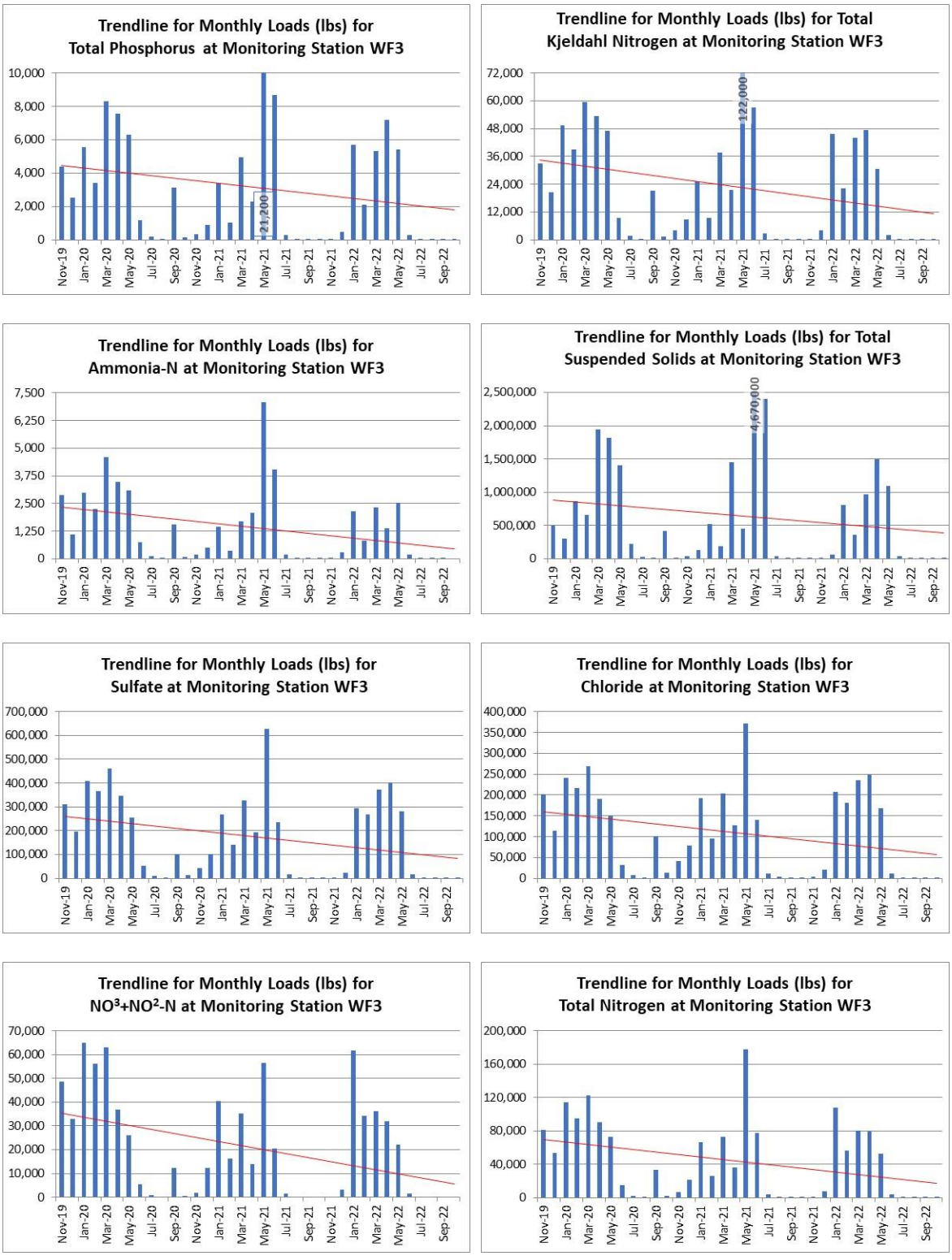

Figure 43. Trend lines for Monthly Loads for the WF3 Monitoring Station

Annual Parameter Loadings at WF3

Sampling Period	Annual Discharge (Cubic Feet)	TP (lbs)	TKN (lbs)	NH_3-N (lbs)	TSS (lbs)	SO_4 (lbs)	Cl^- (lbs)	NO_3+NO_2 - N (lbs)	TN (lbs)
11/05/19-10/14/20	1.33E+10	4.26E+04	3.35E+05	2.29E+04	8.17E+06	2.51E+06	1.53E+06	3.47E+05	6.82E+05
10/15/20-10/14/21	1.03E+10	4.32E+04	2.90E+05	1.78E+04	9.90E+06	1.97E+06	1.27E+06	2.00E+05	4.90E+05
10/15/21-10/03/22	8.49E+09	2.65E+04	1.97E+05	9.73E+03	4.81E+06	1.66E+06	1.08E+06	1.90E+05	3.88E+05
Project Total	**3.21E+10**	**1.12E+05**	**8.22E+05**	**5.04E+04**	**2.29E+07**	**6.14E+06**	**3.89E+06**	**7.37E+05**	**1.56E+06**

Table 46. Annual Discharge and Loading Estimations at the WF3 Monitoring Station.

Unit Area Loads at WF3

Sampling Period	TP (lbs/acre)	TKN (lbs/acre)	NH_3-N (lbs/acre)	TSS (lbs/acre)	SO_4 (lbs/acre)	Cl^- (lbs/acre)	NO_3+NO_2 - N (lbs/acre)	TN (lbs/acre)
11/05/19-10/14/20	0.30	2.4	0.16	58	18	11	2.45	4.8
10/15/20-10/14/21	0.30	2.0	0.13	70	14	9	1.41	3.5
10/15/21-10/03/22	0.19	1.4	0.07	34	12	8	1.34	2.7
Mean	**0.26**	**1.9**	**0.12**	**54**	**14**	**9**	**1.73**	**3.7**

Table 47. Unit Area Loading Estimations at the WF3 Monitoring Station.

Summary for WF3 Monitoring Station

At WF3, 154 samples were collected and analyzed. Analytical results for NH_3-N and NO_3+NO_2 -N were less than laboratory reporting limits forty-five and four times, respectively.

Throughout the project period, parameter concentration data sets resulted in statistically significant negative trends (decreasing with time) for turbidity, SO_4, NO_3+NO_2 -N, and TN. A statistically significant positive trend (increasing with time) was identified for the Cl^- data set. No other significant trends were identified through time for the remaining parameter concentration data sets.

At WF3, from the project's commencement, computed regression analyses for the extrapolated monthly loads resulted in negatively sloped trendlines for all analyzed parameters.

At WF3, the first year period resulted in greater discharge than the other periods and greater annual loads for TKN, NH_3-N, SO_4, Cl^-, NO_3+NO_2 -N, and TN. The second year period resulted in the second to greatest discharge and greater annual loads for TP and TSS.

WO Monitoring Station

The WO monitoring station is located on White Oak Creek at the Union Grove Road bridge crossing (35.254711°; -92.894158°), north of Interstate 40. The WO monitoring station is in the Gum Log Creek 12-digit HUC and drains the southern portion of the HUC. It is a tributary to Gum Log Creek; its confluence is downstream of the GL monitoring station. The WO monitoring station receives water from the least amount of acreage when compared to all other monitoring stations evaluated in this project. The WO monitoring station receives approximately 14 percent of the drainage within the Gum Log Creek HUC12. The approximated acreage drained upstream of the WO monitoring station is 4,589 acres (7.2 mi^2).

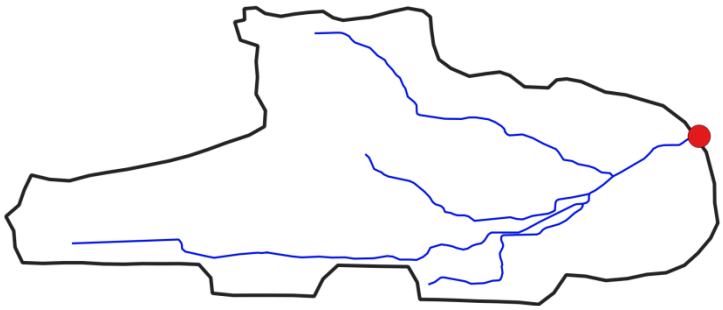

Figure 44 Receiving Waters of the WO Monitoring Station

Sampling Period	TP (mg/L) N=153	TKN (mg/L) N=153	NH_3-N (mg/L) N=149	Turbidity (NTU) N=153	TSS (mg/L) N=153	SO_4 (mg/L) N=152	Cl^- (mg/L) N=152	NO_3+NO_2 - N (mg/L) N=146	TN (mg/L) N=152
11/05/19-10/14/20	0.37	1.83	0.75	20.8	11.4	14.12	21.33	0.38	2.18
10/15/20-10/14/21	0.33	1.67	0.44	26.7	18.5	11.54	27.17	0.45	2.10
10/15/21-10/03/22	0.34	1.75	0.80	23.9	19.9	11.30	20.19	0.59	2.30

Table 48. Annual Mean Parameter Concentrations within reportable limits at the WO Monitoring Station

Parameter	Minimum	Maximum	Mean	Std. deviation	Kendall's tau	S	p-value (Two-tailed)
TP	0.03	4.77	0.35	0.72	0.146	1671	0.008
TKN	0.45	16.30	1.75	2.52	0.121	1406	0.027
NH_3-N	0.01	15.10	0.64	1.88	0.165	1882	0.003
Turbidity	0.9	233.0	23.8	28.0	-0.102	-1184	0.062
TSS	1.0	234.0	16.6	32.6	0.060	677	0.285
SO_4	0.90	93.20	12.30	7.72	-0.148	-1693	0.007
Cl^-	2.90	118.00	22.90	21.88	0.067	768	0.222
NO_3+NO_2 -N	0.01	1.97	0.46	0.40	0.196	2234	0.000
TN	0.58	16.30	2.22	2.50	0.203	2323	0.000

Positive S-values indicate trends are increasing, negative S-values indicate trends are decreasing.
If the p-value is less than 0.05 (the alpha value), there is a significant trend in the data set.

Table 49 Mann-Kendall Statistical Test for Trend Analysis of Parameter Concentration at the WO Monitoring Station during the Project Period.

Stage, Discharge, and Parameter Loads at WO

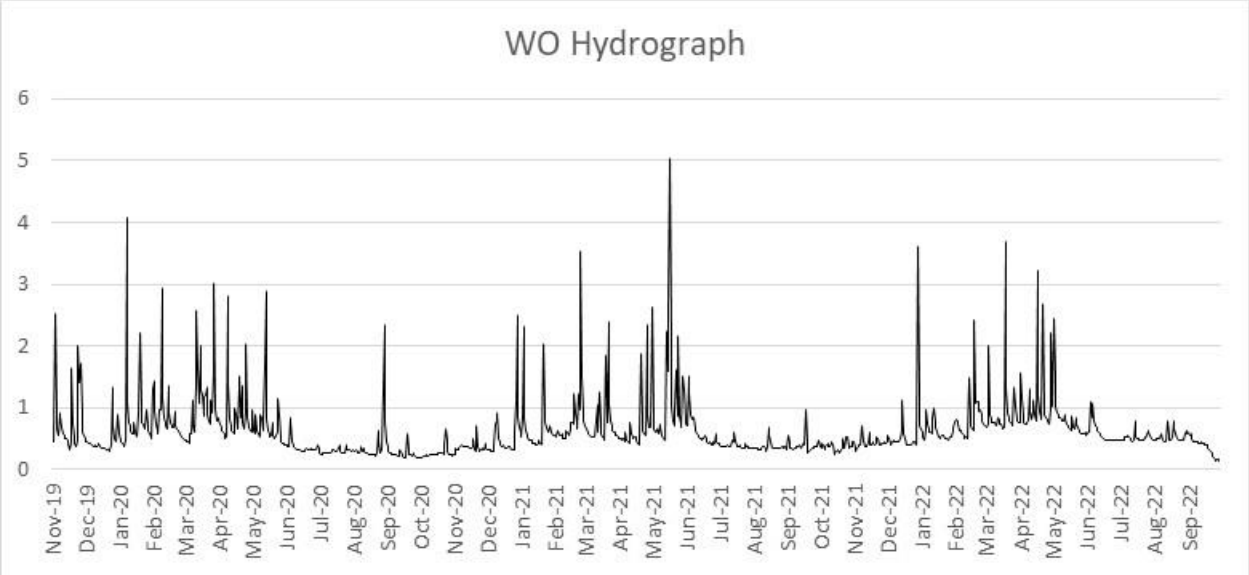

Figure 45. Daily Average Stage for the Project Period at the WO Monitoring Station

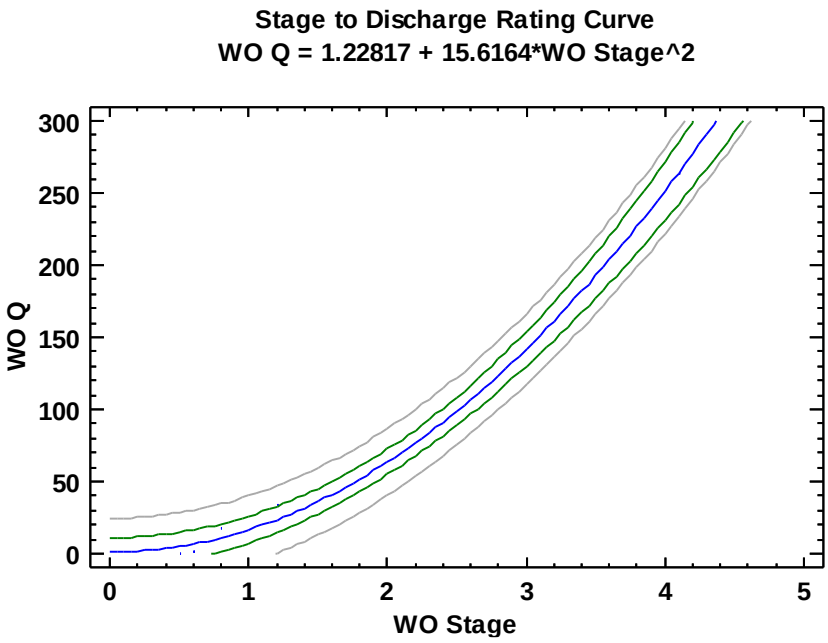

Figure 46. Stage Rating Curve and Regression Equation for the WO Monitoring Station

Source	Sum of Squares	Mean Square	F-Ratio	P-Value
Model	53564.8	53564.8	906.32	0.0000
Residual	236.407	59.1017		
Total (Corr.)	53801.3			

Table 50. Stage Rating Curve Analysis of Variance for the WO Monitoring Station.

Trend Analysis of Monthly Loading at WO

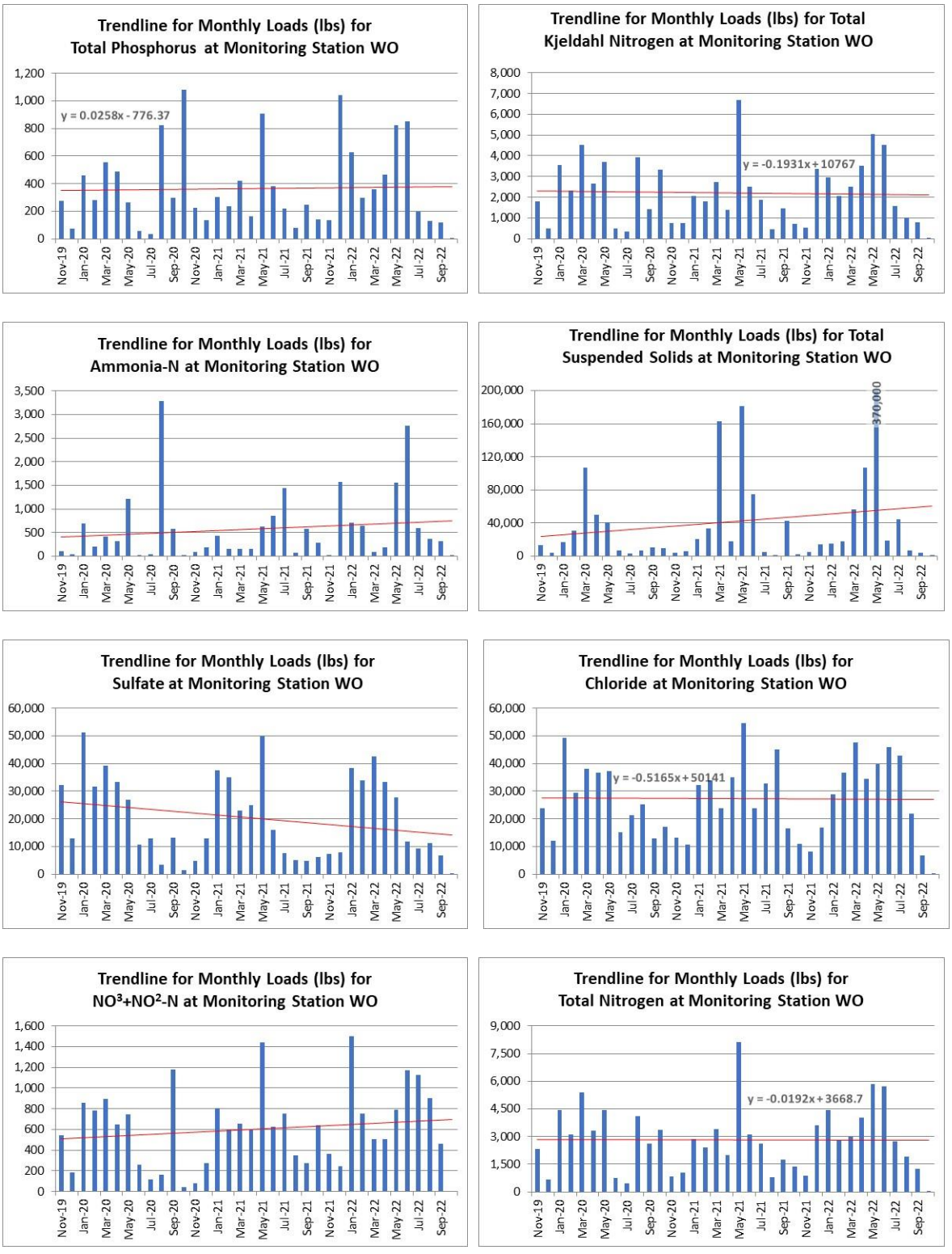

Figure 47. Trend lines for Monthly Loads for the WO Monitoring Station

Annual Parameter Loadings at WO

Sampling Period	Annual Discharge (Cubic Feet)	TP (lbs)	TKN (lbs)	NH_3-N (lbs)	TSS (lbs)	SO_4 (lbs)	Cl^- (lbs)	NO_3+NO_2 - N (lbs)	TN (lbs)
11/05/19-10/14/20	3.32E+08	3.87E+03	2.59E+04	6.94E+03	2.90E+05	2.68E+05	3.04E+05	6.43E+03	3.23E+04
10/15/20-10/14/21	3.22E+08	4.17E+03	2.53E+04	4.82E+03	5.56E+05	2.25E+05	3.41E+05	6.61E+03	3.19E+04
10/15/21-10/03/22	3.16E+08	5.14E+03	2.85E+04	9.14E+03	6.58E+05	2.33E+05	3.36E+05	8.79E+03	3.73E+04
Project Total	**9.69E+08**	**1.32E+04**	**7.97E+04**	**2.09E+04**	**1.50E+06**	**7.26E+05**	**9.82E+05**	**2.18E+04**	**1.02E+05**

Table 51. Annual Discharge and Loading Estimations at the WO Monitoring Station.

Unit Area Loads at WO

Sampling Period	TP (lbs/acre)	TKN (lbs/acre)	NH_3-N (lbs/acre)	TSS (lbs/acre)	SO_4 (lbs/acre)	Cl^- (lbs/acre)	NO_3+NO_2 - N (lbs/acre)	TN (lbs/acre)
11/05/19-10/14/20	0.84	5.6	1.51	63	59	66	1.40	7.0
10/15/20-10/14/21	0.91	5.5	1.05	121	49	74	1.44	7.0
10/15/21-10/03/22	1.12	6.2	1.99	143	51	73	1.92	8.1
Mean	**0.96**	**5.8**	**1.52**	**109**	**53**	**71**	**1.59**	**7.4**

Table 52. Unit Area Loading Estimations at the WO Monitoring Station.

Summary for WO Monitoring Station

At WO, the collection of 154 samples was attempted. The 10/3/22 sample was not collected due to drought conditions. Analytical results for NH_3-N and NO_3 +NO_2-N were less than laboratory reporting limits four and eight times, respectively.

Throughout the project period, one statistically significant negative trend (decreasing with time) was identified for the SO_4 data set. Statistically significant positive trends (increasing with time) were identified for the TP, TKN, NH_3-N, NO_3 +NO_2-N, and TN data sets. No other significant trends were identified through time for the remaining parameter concentration data sets.

At WO, from the project's commencement, computed regression analyses for the extrapolated monthly loads resulted in negatively sloped trendlines for TKN, SO_4, Cl^-, and TN; positively sloped trendlines were identified for the monthly loads for TP, NH_3-N, TSS and NO_3 +NO_2-N.

At WO, the first year period resulted in greater discharge than the other periods and the greatest SO_4 annual loads. Unlike other stations, the sampling period with the lowest discharge (the third year), resulted in the highest loads for TP, TKN, NH_3-N, TSS, NO_3+NO_2-N and TN.

Conclusion

Potential water quality degradation associated with non-point source pollution within Arkansas' Lake Conway-Point Remove Watershed has been identified as a concern by the Arkansas Natural Resource Division and its 319 program. This project was developed to enable the collection, analysis, and reporting of water quality and discharge data so that annual parameter loadings and unit area loadings could be estimated for numerous 12-digit HUCs within the watershed. Ten monitoring stations, representative of the LCPR watershed, were selected for monitoring during this project.

The collection of water samples occurred at weekly intervals. Upon collection, samples were preserved and delivered to the Ouachita Baptist University Water Laboratory for analysis. Water quality constituents that were reported included TP, TKN, NH_3-N, Turbidity, TSS, SO_4, Cl^-, NO_3+NO_2-N, and TN. In-situ measurements of temperature, pH, conductivity, and dissolved oxygen were taken at time of sample collection.

The Mann-Kendall Statistical Test, a nonparametric form of monontonic trend regression analysis, was utilized to assess trends in parameter concentration at each station. The test identified significantly decreasing trends for SO_4 at each station except one, PR. It identified significantly decreasing trends at eight stations for NO_3+NO_2-N (exceptions were at WF3 and WO). It identified significantly decreasing trends at six stations (CYP, EF1, LCC, WF1, WF2, and WF3) for turbidity. However, significantly increasing trends at seven stations (EF1, EF2, LCC, PR, WF1, WF2, and WF3) for Cl^- and at six stations (EF2, GL, PR, WF1, WF2, and WF3) for TKN were identified.

Mathematically, load is essentially the product of water discharge and the concentration of a substance in the water (EPA, 2013). Loading values are greatly influenced by discharge. Except at WF3, stage rating discharge curves were developed for each station. Developing a stage-discharge relationship is a time consuming, long-term task. The commonly used area-velocity method requires measurement of stage, cross-sectional area, and flow velocity for a range of stages (Harmel, 2006). Surveys were conducted at nine stations during low, medium, and high stages to produce discharge data; stage was continuously measured with pressure transducers. Best fit regression analyses were computed to develop the stage rating discharge curves.

At each station, the first year of the project resulted in the greatest volume of discharge. Computed regression analyses for the extrapolated monthly loads resulted in negatively sloped trendlines for all analyzed parameters, except at the WO station where positively sloped trendlines were identified for monthly loads of TP, NH_3-N, TSS and NO_3 +NO_2-N. Also, annual loads were greatest for all parameters during the first year at seven of the ten stations (exceptions were at CYP, WF3, and WO).

Unit area loads were extrapolated for each of the stations, the combined stations average unit area loads in pounds per acre were TP = 0.4, TKN = 23.65, NH3-N = 0.30, TSS = 66, SO4 = 23, CL- = 18, NO3+NO2-N = 1.6, and TN = 4.3.

At numerous stations, data collected during the project is indicative of what can be considered normal to high water quality. If trends in water quality parameters continue to improve, stream degradation may potentially be reversed. Results from this project shall be beneficial to agencies in assessing these streams impairment status now and into the future.

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Appendix I
Laboratory Data

Laboratory Data
Analyzed by
Ouachita Baptist University Water Lab

Water Quality Monitoring
Lake Conway Point Removed
HUC 11110203 PJT# 19-900
Equilibrium, 5019441765

Station ID CYP
Stream Name CYPRESS CREEK
Site Location PERRY COUNTY, AT HWY 113 BRIDGE CROSSING
8 digit HUC 11110203
Lat 35° 4'2.13"N
Long 92°44'32.21"W

Minimum Detection and Minimum Reporting Limits

Parameter	TP	TKN	NH3-N	Turbidity	TSS	Sulfate	Chloride	NO_3+NO_2-N
Units	mg/L	mg/L	mg/L	NTU	mg/L	mg/L	mg/L	mg/L
MDL	0.01	0.03	0.01	0.02	0.5	0.15	0.08	0.01
MRL	0.02	0.05	0.02	0.1	1	0.5	0.5	0.02

*NR = not reportable due to either NO3+NO2-N or TKN resulting in less than MRL

Sample Date	Watershed	Site	TP (mg/L)	TKN (mg/L)	Ammonia-N (mg/L)	Turbidity (NTU)	TSS (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	NO3+NO2-N (mg/L)	TN (mg/L)
10/15/2019	LCPR	Cyp	0.09	0.59	0.10	13.3	4	3.3	7.0	0.06	0.65
10/22/2019	LCPR	Cyp	0.09	0.62	0.08	20.7	9	3.4	6.9	0.03	0.65
10/29/2019	LCPR	Cyp	0.09	0.54	0.04	18.1	9	3.4	6.9	0.02	0.56
11/5/2019	LCPR	Cyp	0.18	0.70	0.03	24.6	7	6.2	8.6	<0.02	NR
11/12/2019	LCPR	Cyp	0.16	0.75	0.04	25.1	5	8.8	8.7	0.10	0.85
11/19/2019	LCPR	Cyp	0.12	0.51	0.02	23.4	11	8.8	8.4	0.40	0.91
11/24/2019	LCPR	Cyp	0.15	0.60	<0.02	20.0	9	8.3	7.8	0.21	0.81
12/3/2019	LCPR	Cyp	0.15	0.59	0.05	17.0	6	12.5	6.8	0.26	0.85
12/10/2019	LCPR	Cyp	0.13	0.52	0.06	14.1	5	9.9	6.5	0.36	0.88
12/17/2019	LCPR	Cyp	0.10	0.53	0.05	14.7	2	9.3	6.8	0.36	0.89
12/31/2019	LCPR	Cyp	0.19	0.86	0.05	27.4	7	7.5	8.5	0.31	1.17
1/6/2020	LCPR	Cyp	0.14	0.80	0.05	19.0	3	10.1	9.7	0.30	1.10
1/14/2020	LCPR	Cyp	0.15	0.95	0.03	36.9	8	5.9	4.8	0.24	1.19
1/21/2020	LCPR	Cyp	0.08	0.53	0.05	18.8	3	8.2	6.0	0.36	0.89
1/28/2020	LCPR	Cyp	0.07	0.59	0.02	19.4	4	7.0	5.2	0.29	0.88
2/4/2020	LCPR	Cyp	0.07	0.47	0.03	16.4	5	7.9	6.5	0.36	0.83
2/11/2020	LCPR	Cyp	0.09	0.64	0.03	24.3	6	7.1	5.5	0.44	1.08
2/18/2020	LCPR	Cyp	0.07	0.79	0.05	17.9	6	5.6	3.9	0.22	1.01
2/25/2020	LCPR	Cyp	0.07	0.45	0.02	17.8	5	6.7	5.3	0.29	0.74
3/3/2020	LCPR	Cyp	0.07	0.60	0.03	15.9	4	7.1	6.2	0.32	0.92
3/10/2020	LCPR	Cyp	0.13	0.78	0.04	23.2	8	5.2	6.4	0.20	0.98
3/17/2020	LCPR	Cyp	0.14	0.79	0.03	29.8	10	4.8	4.3	0.15	0.94
3/24/2020	LCPR	Cyp	0.10	0.77	0.05	19.8	5	5.3	3.9	0.12	0.89
3/31/2020	LCPR	Cyp	0.16	0.85	0.05	32.0	16	1.8	2.0	0.08	0.93
4/7/2020	LCPR	Cyp	0.15	0.64	0.05	14.3	8	4.2	3.0	0.12	0.76
4/13/2020	LCPR	Cyp	0.24	1.20	0.12	37.6	26	NR	NR	NR	NR
4/21/2020	LCPR	Cyp	0.12	0.67	0.05	21.7	13	4.8	3.8	0.16	0.83
4/28/2020	LCPR	Cyp	0.11	0.63	0.04	18.4	12	4.1	3.2	0.04	0.67
5/5/2020	LCPR	Cyp	0.14	0.76	0.07	21.7	18	4.2	3.2	0.20	0.96
5/12/2020	LCPR	Cyp	0.13	0.56	0.06	19.0	11	4.8	4.3	0.24	0.80
5/19/2020	LCPR	Cyp	0.14	0.78	0.06	27.1	17	2.1	1.8	0.05	0.83
5/26/2020	LCPR	Cyp	0.17	0.91	0.11	14.4	11	2.9	2.3	0.08	0.99
6/2/2020	LCPR	Cyp	0.15	0.68	0.12	20.1	18	4.1	3.5	0.18	0.86
6/9/2020	LCPR	Cyp	0.29	1.25	0.12	35.1	44	3.1	3.3	0.16	1.41
6/16/2020	LCPR	Cyp	0.12	0.71	0.06	23.2	14	4.9	3.5	0.32	1.03
6/23/2020	LCPR	Cyp	0.11	0.58	0.04	21.8	12	4.3	3.4	0.30	0.88
6/30/2020	LCPR	Cyp	0.12	0.62	0.06	20.8	14	5.4	3.9	0.23	0.85
7/6/2020	LCPR	Cyp	0.13	0.63	0.03	12.9	10	3.3	4.1	0.12	0.75
7/13/2020	LCPR	Cyp	0.13	0.56	0.04	16.6	16	2.7	4.2	0.07	0.63
7/20/2020	LCPR	Cyp	0.11	0.68	0.03	23.6	21	2.2	4.3	0.04	0.72
7/27/2020	LCPR	Cyp	0.15	0.84	0.08	24.9	14	3.2	4.5	0.10	0.94
8/3/2020	LCPR	Cyp	0.15	0.69	1.08	22.6	14	3.7	5.9	0.21	0.90
8/10/2020	LCPR	Cyp	0.12	0.66	0.04	20.0	11	3.8	5.5	0.05	0.71
8/17/2020	LCPR	Cyp	0.15	0.77	0.05	20.5	22	2.8	5.5	0.04	0.81
8/24/2020	LCPR	Cyp	0.09	0.83	0.06	14.2	9	4.1	5.2	0.06	0.89
8/31/2020	LCPR	Cyp	0.18	0.91	0.11	29.5	24	4.5	4.3	0.26	1.17
9/6/2020	LCPR	Cyp	0.17	0.92	0.06	23.8	22	4.7	3.7	0.27	1.19
9/14/2020	LCPR	Cyp	0.15	0.58	0.05	23.1	14	4.4	4.7	0.33	0.91
9/21/2020	LCPR	Cyp	0.12	0.40	0.02	26.3	18	6.9	4.4	0.18	0.58
9/28/2020	LCPR	Cyp	0.13	0.57	0.04	16.3	13	3.8	4.7	0.16	0.73
10/5/2020	LCPR	Cyp	0.13	0.61	0.04	23.5	13	4.1	5.8	0.08	0.69

Laboratory Data
Analyzed by
Ouachita Baptist University Water Lab

Water Quality Monitoring
Lake Conway Point Removed
HUC 11110203 PJT# 19-900
Equilibrium, 5019441765

Sample Date	Watershed	Site	TP (mg/L)	TKN (mg/L)	Ammonia-N (mg/L)	Turbidity (NTU)	TSS (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	NO3+NO2-N (mg/L)	TN (mg/L)
10/12/2020	LCPR	Cyp	0.13	0.55	0.02	18.3	13	4.2	8.6	0.13	0.68
10/19/2020	LCPR	Cyp	0.11	0.53	0.04	14.2	5	9.6	7.2	0.07	0.60
10/26/2020	LCPR	Cyp	0.10	0.52	0.02	12.8	8	4.0	6.3	0.03	0.55
11/2/2020	LCPR	Cyp	0.42	0.71	<0.02	25.3	22	4.1	8.5	<0.02	NR
11/10/2020	LCPR	Cyp	0.17	0.55	<0.02	13.8	12	2.6	8.5	0.08	0.63
11/17/2020	LCPR	Cyp	0.15	0.57	0.03	19.6	21	2.0	9.2	<0.02	NR
11/21/2020	LCPR	Cyp	0.15	0.54	<0.02	15.9	14	2.0	8.9	0.03	0.57
12/1/2020	LCPR	Cyp	0.22	0.74	0.02	13.9	7	1.9	10.6	<0.02	NR
12/8/2020	LCPR	Cyp	0.18	0.61	0.02	15.6	8	3.0	10.3	0.10	0.71
12/15/2020	LCPR	Cyp	0.17	0.63	0.04	27.5	9	6.1	9.6	0.26	0.89
12/21/2020	LCPR	Cyp	0.11	0.54	0.02	20.0	7	8.1	8.7	0.25	0.79
12/28/2020	LCPR	Cyp	0.18	0.45	<0.02	17.1	6	7.0	9.1	0.27	0.72
1/5/2021	LCPR	Cyp	0.11	0.64	0.02	27.9	8	7.1	6.6	0.25	0.89
1/12/2021	LCPR	Cyp	0.08	0.60	0.09	23.8	6	6.5	5.3	0.30	0.90
1/19/2021	LCPR	Cyp	0.06	0.42	0.02	18.4	3	7.1	6.0	0.41	0.83
1/26/2021	LCPR	Cyp	0.19	0.81	<0.02	52.8	24	5.8	6.9	0.25	1.06
2/2/2021	LCPR	Cyp	0.08	0.57	0.03	19.9	4	6.9	7.3	0.20	0.77
2/9/2021	LCPR	Cyp	0.07	0.41	0.02	17.9	8	7.7	7.8	0.31	0.72
2/23/2021	LCPR	Cyp	0.12	0.63	0.03	28.1	17	7.3	8.6	0.20	0.83
3/2/2021	LCPR	Cyp	0.14	1.22	0.05	56.5	19	4.6	3.8	0.09	1.31
3/8/2021	LCPR	Cyp	0.08	0.59	<0.02	24.7	6	9.0	5.2	0.34	0.93
3/16/2021	LCPR	Cyp	0.21	0.82	0.03	14.3	12	6.0	6.5	0.14	0.96
3/23/2021	LCPR	Cyp	0.20	1.13	<0.02	120.0	79	3.7	4.1	0.30	1.43
3/30/2021	LCPR	Cyp	0.12	0.96	0.04	21.8	15	4.4	4.1	0.12	1.08
4/6/2021	LCPR	Cyp	0.11	0.62	0.03	21.3	9	5.2	5.2	0.24	0.86
4/13/2021	LCPR	Cyp	0.10	0.79	0.13	17.5	8	5.3	5.6	0.25	1.04
4/20/2021	LCPR	Cyp	0.14	0.78	0.07	16.0	9	4.2	6.3	0.23	1.01
4/27/2021	LCPR	Cyp	0.19	1.02	0.08	21.3	12	5.9	7.2	0.14	1.16
5/4/2021	LCPR	Cyp	0.22	1.12	0.09	19.5	17	4.1	5.1	0.06	1.18
5/11/2021	LCPR	Cyp	0.16	0.65	0.10	21.6	12	4.0	4.1	0.20	0.85
5/18/2021	LCPR	Cyp	0.26	1.02	0.08	33.6	28	2.4	2.7	0.13	1.15
5/25/2021	LCPR	Cyp	0.17	0.76	0.09	18.0	13	3.5	2.6	0.08	0.84
6/1/2021	LCPR	Cyp	0.21	0.90	0.09	76.3	68	3.5	3.4	0.21	1.11
6/8/2021	LCPR	Cyp	0.21	0.80	0.08	29.4	25	3.4	3.6	0.15	0.95
6/15/2021	LCPR	Cyp	0.18	0.71	0.09	24.5	25	3.4	3.9	0.24	0.95
6/22/2021	LCPR	Cyp	0.14	0.50	0.05	22.5	12	4.3	4.5	0.28	0.78
6/29/2021	LCPR	Cyp	0.13	0.62	0.05	24.8	16	3.7	4.7	0.20	0.82
7/6/2021	LCPR	Cyp	0.13	0.56	0.03	19.5	9	3.6	4.8	0.05	0.61
7/13/2021	LCPR	Cyp	0.11	0.65	0.04	24.3	16	3.8	5.4	0.03	0.68
7/20/2021	LCPR	Cyp	0.16	0.86	0.08	24.9	23	3.7	6.4	0.11	0.97
7/27/2021	LCPR	Cyp	0.11	0.79	0.04	22.1	14	3.7	6.7	0.07	0.86
8/3/2021	LCPR	Cyp	0.10	0.73	0.04	23.5	11	3.7	6.5	0.05	0.78
8/10/2021	LCPR	Cyp	0.10	0.67	0.05	16.0	8	2.5	6.2	0.04	0.71
8/17/2021	LCPR	Cyp	0.08	0.56	0.04	12.3	8	5.5	6.8	0.05	0.61
8/24/2021	LCPR	Cyp	0.10	0.61	<0.02	11.2	16	1.5	5.3	<0.02	NR
8/31/2021	LCPR	Cyp	0.10	0.59	0.03	14.5	15	4.0	6.4	0.03	0.62
9/7/2021	LCPR	Cyp	0.11	0.70	0.04	16.1	18	1.6	5.6	0.11	0.81
9/14/2021	LCPR	Cyp	0.08	0.56	0.04	15.1	9	1.1	5.9	0.04	0.60
9/21/2021	LCPR	Cyp	0.06	0.61	0.03	6.3	3	1.2	5.7	0.07	0.68
9/28/2021	LCPR	Cyp	0.11	0.68	0.06	16.6	34	1.4	6.0	0.13	0.81
10/5/2021	LCPR	Cyp	0.08	0.57	0.03	15.8	12	2.9	6.8	0.02	0.59

Laboratory Data
Analyzed by
Ouachita Baptist University Water Lab

Water Quality Monitoring
Lake Conway Point Removed
HUC 11110203 PJT# 19-900
Equilibrium, 5019441765

Sample Date	Watershed	Site	TP (mg/L)	TKN (mg/L)	Ammonia-N (mg/L)	Turbidity (NTU)	TSS (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	NO3+NO2-N (mg/L)	TN (mg/L)
10/12/2021	LCPR	Cyp	0.06	0.60	0.02	9.7	5	1.5	6.6	0.02	0.62
10/19/2021	LCPR	Cyp	0.07	0.66	<0.02	19.2	13	2.0	7.2	<0.02	NR
10/26/2021	LCPR	Cyp	0.08	0.58	<0.02	9.6	11	3.2	7.2	0.02	0.60
11/2/2021	LCPR	Cyp	0.12	0.69	<0.02	16.7	16	2.7	8.1	<0.02	NR
11/9/2021	LCPR	Cyp	0.16	0.65	<0.02	13.2	9	4.3	9.4	<0.02	NR
11/16/2021	LCPR	Cyp	0.27	1.11	<0.02	23.2	17	4.2	10.4	<0.02	NR
11/22/2021	LCPR	Cyp	0.24	0.91	<0.02	12.1	13	4.2	11.6	<0.02	NR
11/30/2021	LCPR	Cyp	0.20	0.92	<0.02	12.9	14	3.6	12.8	0.02	0.94
12/7/2021	LCPR	Cyp	0.23	0.96	0.02	13.6	14	2.1	12.6	<0.02	NR
12/14/2021	LCPR	Cyp	0.20	0.94	<0.02	12.7	12	1.8	12.5	<0.02	NR
12/19/2021	LCPR	Cyp	0.31	1.27	0.02	59.7	70	9.6	8.0	0.27	1.54
12/26/2021	LCPR	Cyp	0.16	0.89	0.05	23.3	7	10.2	8.5	0.42	1.31
1/4/2022	LCPR	Cyp	0.15	0.91	0.02	26.5	10	7.5	6.1	0.27	1.18
1/11/2022	LCPR	Cyp	0.12	0.79	0.04	25.7	8	6.7	5.7	0.32	1.11
1/18/2022	LCPR	Cyp	0.10	0.60	0.02	18.8	4	7.1	5.9	0.27	0.87
1/25/2022	LCPR	Cyp	0.07	0.62	<0.02	15.4	4	7.0	6.3	0.36	0.98
2/1/2022	LCPR	Cyp	0.06	0.51	0.02	15.6	4	7.4	6.8	0.38	0.89
2/8/2022	LCPR	Cyp	0.09	0.48	<0.02	13.8	3	6.1	7.5	0.18	0.66
2/15/2022	LCPR	Cyp	0.06	0.49	0.02	12.7	5	7.9	9.0	0.15	0.64
2/21/2022	LCPR	Cyp	0.08	0.56	0.04	14.8	4	7.2	8.9	0.10	0.66
2/28/2022	LCPR	Cyp	0.09	0.67	0.03	20.9	7	5.7	4.6	0.25	0.92
3/7/2022	LCPR	Cyp	0.09	0.59	0.03	26.8	10	5.1	4.6	0.26	0.85
3/14/2022	LCPR	Cyp	0.06	0.44	0.02	13.7	4	6.2	5.8	0.24	0.68
3/21/2022	LCPR	Cyp	0.08	0.55	0.02	12.4	5	5.8	6.7	0.15	0.70
3/28/2022	LCPR	Cyp	0.09	0.74	0.02	19.2	11	3.9	3.3	0.09	0.83
4/4/2022	LCPR	Cyp	0.09	0.59	0.03	21.2	12	4.8	4.5	0.16	0.75
4/11/2022	LCPR	Cyp	0.06	0.43	<0.02	16.5	18	4.1	3.4	0.22	0.65
4/18/2022	LCPR	Cyp	0.13	0.66	0.04	17.7	13	3.7	3.5	0.11	0.77
4/25/2022	LCPR	Cyp	0.15	0.70	<0.02	16.3	16	2.7	2.3	0.09	0.79
5/2/2022	LCPR	Cyp	0.18	0.83	0.09	62.8	73	3.5	3.1	0.22	1.05
5/9/2022	LCPR	Cyp	0.13	0.59	0.05	11.9	6	3.1	2.9	0.12	0.71
5/16/2022	LCPR	Cyp	0.19	0.76	0.18	14.7	12	3.7	3.8	0.23	0.99
5/23/2022	LCPR	Cyp	0.17	0.79	0.10	25.0	20	4.0	3.7	0.27	1.06
5/31/2022	LCPR	Cyp	0.16	0.64	0.05	19.8	17	3.3	5.0	0.25	0.89
6/6/2022	LCPR	Cyp	0.16	0.67	0.04	19.0	16	3.7	5.2	0.27	0.94
6/13/2022	LCPR	Cyp	0.27	0.78	0.09	15.2	13	3.0	3.2	0.17	0.95
6/20/2022	LCPR	Cyp	0.15	0.61	0.08	14.5	10	4.0	3.9	0.39	1
6/27/2022	LCPR	Cyp	0.12	0.46	0.03	19.2	14	3.6	4.7	0.16	0.62
7/5/2022	LCPR	Cyp	0.10	0.53	0.04	21.9	17	3.8	4.4	0.30	0.83
7/11/2022	LCPR	Cyp	0.09	0.52	0.04	15.9	18	3.2	5.6	0.05	0.57
7/18/2022	LCPR	Cyp	0.08	0.51	<0.02	16.2	16	4.8	4.9	0.31	0.82
7/25/2022	LCPR	Cyp	0.06	0.47	0.03	11.5	7	2.5	5.0	0.08	0.55
8/1/2022	LCPR	Cyp	0.06	0.46	<0.02	9.2	11	1.9	5.2	0.07	0.53
8/8/2022	LCPR	Cyp	0.06	0.55	0.04	16.6	21	2.0	6.8	0.09	0.64
8/15/2022	LCPR	Cyp	0.05	0.41	0.03	11.2	9	1.4	5.3	0.12	0.53
8/22/2022	LCPR	Cyp	0.04	0.42	0.03	7.4	7	1.5	5.4	0.07	0.49
8/29/2022	LCPR	Cyp	0.08	0.61	0.03	3.4	5	2.3	4.1	0.08	0.69
9/6/2022	LCPR	Cyp	0.05	0.47	0.03	8.1	11	1.0	5.5	0.07	0.54
9/12/2022	LCPR	Cyp	0.06	0.51	0.04	13.7	23	1.0	4.9	0.08	0.59
9/19/2022	LCPR	Cyp	0.05	0.58	0.04	7.7	5	1.0	5.2	0.16	0.74
9/26/2022	LCPR	Cyp	0.04	0.48	0.03	7.4	20	0.8	7.2	0.05	0.53

Laboratory Data
Analyzed by
Ouachita Baptist University Water Lab

Water Quality Monitoring
Lake Conway Point Removed
HUC 11110203 PJT# 19-900
Equilibrium, 5019441765

Station ID EF1
Stream Name EAST FORK POINT REMOVE CREEK
Site Location CONWAY COUNTY, HWY 124 BRIDGE CROSSING
8 digit HUC 11110203
Lat 35°23'47.04"N
Long 92°39'32.79"W

Minimum Detection and Minimum Reporting Limits

Parameter	TP	TKN	NH3-N	Turbidity	TSS	Sulfate	Chloride	NO_3+NO_2-N
Units	mg/L	mg/L	mg/L	NTU	mg/L	mg/L	mg/L	mg/L
MDL	0.01	0.03	0.01	0.02	0.5	0.15	0.08	0.01
MRL	0.02	0.05	0.02	0.1	1	0.5	0.5	0.02

*NR = not reportable due to either NO3+NO2-N or TKN resulting in less than MRL

Sample Date	Watershed	Site	TP (mg/L)	TKN (mg/L)	Ammonia-N (mg/L)	Turbidity (NTU)	TSS (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	NO3+NO2-N (mg/L)	TN (mg/L)
10/15/2019	LCPR	EF1	0.04	0.42	0.03	6.7	3	4.0	2.4	0.34	0.76
10/22/2019	LCPR	EF1	0.04	0.33	0.04	9.2	6	4.2	2.7	0.29	0.62
10/29/2019	LCPR	EF1	0.03	0.34	0.03	6.2	2	4.1	2.6	0.30	0.64
11/5/2019	LCPR	EF1	0.03	0.31	0.05	5.5	2	4.4	2.8	0.35	0.66
11/12/2019	LCPR	EF1	0.05	0.35	0.03	9.4	3	4.2	2.5	0.50	0.85
11/19/2019	LCPR	EF1	0.02	0.30	0.02	6.3	4	4.3	2.6	0.51	0.81
11/24/2019	LCPR	EF1	0.07	0.42	<0.02	14.5	7	3.9	2.4	0.47	0.89
12/3/2019	LCPR	EF1	0.05	0.35	0.02	10.8	3	3.8	2.2	0.51	0.86
12/10/2019	LCPR	EF1	0.03	0.30	0.03	8.1	2	9.0	2.7	0.49	0.79
12/17/2019	LCPR	EF1	0.02	0.29	0.03	6.1	1	4.2	2.4	0.50	0.79
12/31/2019	LCPR	EF1	0.04	0.43	0.02	7.9	5	4.7	2.6	0.43	0.86
1/6/2020	LCPR	EF1	0.02	0.34	0.02	7.4	1	4.9	2.7	0.48	0.82
1/14/2020	LCPR	EF1	0.08	0.53	0.03	23.6	11	3.4	1.8	0.50	1.03
1/21/2020	LCPR	EF1	0.04	0.39	0.03	14.0	5	3.9	2.1	0.51	0.90
1/28/2020	LCPR	EF1	0.03	0.29	<0.02	10.4	4	4.0	2.3	0.56	0.85
2/4/2020	LCPR	EF1	0.03	0.28	0.02	9.0	5	4.4	2.5	0.52	0.80
2/11/2020	LCPR	EF1	0.02	0.26	0.02	8.4	3	4.0	1.8	0.29	0.55
2/18/2020	LCPR	EF1	0.04	0.42	0.02	15.9	6	3.8	2.1	0.50	0.92
2/25/2020	LCPR	EF1	0.03	0.37	0.02	8.8	4	4.1	2.2	0.45	0.82
3/3/2020	LCPR	EF1	0.02	0.30	<0.02	6.7	3	5.3	2.9	0.39	0.69
3/10/2020	LCPR	EF1	0.03	0.35	0.02	8.5	6	4.9	2.5	0.36	0.71
3/17/2020	LCPR	EF1	0.05	0.44	0.03	17.5	10	3.8	2.1	0.47	0.91
3/24/2020	LCPR	EF1	0.04	0.35	<0.02	13.7	6	3.8	2.0	0.40	0.75
3/31/2020	LCPR	EF1	0.09	0.54	0.03	21.4	19	3.0	1.7	0.29	0.83
4/7/2020	LCPR	EF1	0.04	0.46	0.03	8.3	6	3.5	1.9	0.27	0.73
4/13/2020	LCPR	EF1	0.06	0.53	0.03	15.1	9	NR	NR	NR	NR
4/21/2020	LCPR	EF1	0.03	0.47	0.03	8.8	5	4.1	2.1	0.27	0.74
4/28/2020	LCPR	EF1	0.04	0.45	0.03	9.2	7	4.1	2.5	0.30	0.75
5/5/2020	LCPR	EF1	0.05	0.62	0.05	9.4	10	3.6	2.1	0.29	0.91
5/12/2020	LCPR	EF1	0.04	0.44	0.04	8.9	6	3.7	2.1	0.29	0.73
5/19/2020	LCPR	EF1	0.09	0.53	0.03	16.1	14	2.9	1.6	0.26	0.79
5/26/2020	LCPR	EF1	0.12	0.67	0.03	28.8	34	2.4	1.5	0.16	0.83
6/2/2020	LCPR	EF1	0.06	0.54	0.03	10.0	7	2.9	1.8	0.18	0.72
6/9/2020	LCPR	EF1	0.11	0.64	0.04	15.4	16	3.0	1.9	0.25	0.89
6/16/2020	LCPR	EF1	0.04	0.35	0.04	6.1	6	3.3	2.1	0.25	0.60
6/23/2020	LCPR	EF1	0.03	0.33	0.03	5.7	4	3.2	1.9	0.25	0.58
6/30/2020	LCPR	EF1	0.03	0.32	0.03	4.6	5	3.5	2.4	0.29	0.61
7/6/2020	LCPR	EF1	0.04	0.41	0.03	6.3	6	4.3	2.0	0.17	0.58
7/13/2020	LCPR	EF1	0.04	0.39	0.02	4.2	5	4.0	2.4	0.24	0.63
7/20/2020	LCPR	EF1	0.03	0.34	0.06	3.5	2	3.8	2.4	0.22	0.56
7/27/2020	LCPR	EF1	0.03	0.36	0.05	3.7	3	3.6	2.7	0.20	0.56
8/3/2020	LCPR	EF1	0.03	0.31	<0.02	3.5	3	3.3	2.6	0.15	0.46
8/10/2020	LCPR	EF1	0.03	0.42	0.02	3.6	2	3.2	2.8	0.10	0.52
8/17/2020	LCPR	EF1	0.04	0.59	0.04	3.7	4	3.1	2.3	0.26	0.85
8/24/2020	LCPR	EF1	0.04	0.37	<0.02	4.2	4	4.0	2.8	0.14	0.51
8/31/2020	LCPR	EF1	0.04	0.43	0.03	5.0	7	3.0	2.1	0.24	0.67
9/6/2020	LCPR	EF1	0.06	0.58	0.02	8.5	9	3.5	2.4	0.30	0.88
9/14/2020	LCPR	EF1	0.03	0.40	0.02	4.3	2	3.5	2.5	0.35	0.75
9/21/2020	LCPR	EF1	0.03	0.37	0.03	4.4	2	4.1	2.8	0.30	0.67
9/28/2020	LCPR	EF1	0.03	0.31	0.02	4.3	3	3.6	2.6	0.27	0.58
10/5/2020	LCPR	EF1	0.03	0.31	0.02	3.6	1	3.9	3.0	0.28	0.59

Laboratory Data
Analyzed by
Ouachita Baptist University Water Lab

Water Quality Monitoring
Lake Conway Point Removed
HUC 11110203 PJT# 19-900
Equilibrium, 5019441765

Sample Date	Watershed	Site	TP (mg/L)	TKN (mg/L)	Ammonia-N (mg/L)	Turbidity (NTU)	TSS (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	NO3+NO2-N (mg/L)	TN (mg/L)
10/12/2020	LCPR	EF1	0.03	0.35	0.02	3.2	2	4.0	2.9	0.18	0.53
10/19/2020	LCPR	EF1	0.03	0.39	<0.02	5.4	5	5.1	3.5	0.17	0.56
10/26/2020	LCPR	EF1	0.02	0.29	0.02	2.9	2	4.2	3.7	0.03	0.32
11/2/2020	LCPR	EF1	0.03	0.35	0.02	5.1	2	3.8	3.0	0.24	0.59
11/10/2020	LCPR	EF1	0.03	0.39	<0.02	3.5	4	3.7	3.0	0.13	0.52
11/17/2020	LCPR	EF1	0.02	0.30	<0.02	2.4	2	3.9	3.1	0.03	0.33
11/21/2020	LCPR	EF1	0.02	0.26	<0.02	2.7	2	3.8	3.2	0.08	0.34
12/1/2020	LCPR	EF1	0.07	0.42	0.03	5.8	2	4.0	3.2	0.33	0.75
12/8/2020	LCPR	EF1	0.02	0.33	0.02	5.4	8	4.1	3.3	0.32	0.65
12/15/2020	LCPR	EF1	0.03	0.42	0.04	10.3	3	4.4	3.4	0.39	0.81
12/21/2020	LCPR	EF1	0.02	0.28	<0.02	6.5	2	4.5	3.4	0.49	0.77
12/28/2020	LCPR	EF1	0.02	0.27	0.02	5.5	1	4.5	3.5	0.48	0.75
1/5/2021	LCPR	EF1	0.05	0.36	0.02	12.2	5	4.2	2.9	0.56	0.92
1/12/2021	LCPR	EF1	0.03	0.37	0.08	9.0	1	4.5	3.1	0.58	0.95
1/19/2021	LCPR	EF1	0.02	0.24	<0.02	6.4	2	4.5	3.0	0.54	0.78
1/26/2021	LCPR	EF1	0.05	0.47	<0.02	17.6	8	4.3	3.0	0.49	0.96
2/2/2021	LCPR	EF1	0.04	0.31	<0.02	10.1	4	4.3	2.7	0.48	0.79
2/9/2021	LCPR	EF1	0.03	0.22	<0.02	6.9	3	4.5	2.9	0.47	0.69
2/23/2021	LCPR	EF1	0.03	0.29	<0.02	9.7	4	4.8	3.1	0.42	0.71
3/2/2021	LCPR	EF1	0.07	0.49	0.03	24.8	13	4.0	2.5	0.50	0.99
3/8/2021	LCPR	EF1	0.04	0.37	<0.02	13.2	5	4.4	2.7	0.44	0.81
3/16/2021	LCPR	EF1	0.05	0.48	0.02	11.4	8	4.2	2.7	0.37	0.85
3/23/2021	LCPR	EF1	0.08	0.55	0.02	22.1	33	3.9	2.4	0.31	0.86
3/30/2021	LCPR	EF1	0.04	0.37	0.02	9.3	6	4.1	2.6	0.27	0.64
4/6/2021	LCPR	EF1	0.03	0.30	0.02	6.4	3	4.2	2.7	0.22	0.52
4/13/2021	LCPR	EF1	0.02	0.45	0.10	5.2	3	4.1	2.5	0.19	0.64
4/20/2021	LCPR	EF1	0.04	0.32	0.02	6.2	3	4.2	2.7	0.20	0.52
4/27/2021	LCPR	EF1	0.04	0.38	0.02	10.7	6	4.1	2.7	0.14	0.52
5/4/2021	LCPR	EF1	0.12	0.83	0.05	28.5	22	3.6	2.1	0.26	1.09
5/11/2021	LCPR	EF1	0.04	0.38	0.02	9.4	8	3.6	2.2	0.17	0.55
5/18/2021	LCPR	EF1	0.08	0.56	0.03	18.1	17	3.7	2.4	0.24	0.80
5/25/2021	LCPR	EF1	0.05	0.45	<0.02	10.0	11	3.5	2.3	0.24	0.69
6/1/2021	LCPR	EF1	0.07	0.59	0.04	19.0	21	3.2	1.9	0.19	0.78
6/8/2021	LCPR	EF1	0.08	0.50	0.03	15.8	14	3.0	1.9	0.20	0.70
6/15/2021	LCPR	EF1	0.07	0.59	0.06	10.0	13	2.8	2.0	0.19	0.78
6/22/2021	LCPR	EF1	0.05	0.99	0.04	6.3	6	3.2	2.1	0.18	1.17
6/29/2021	LCPR	EF1	0.05	0.44	0.04	6.5	8	2.9	2.1	0.16	0.60
7/6/2021	LCPR	EF1	0.04	0.36	0.03	4.6	4	3.2	2.3	0.36	0.72
7/13/2021	LCPR	EF1	0.04	0.41	0.03	4.1	3	3.0	2.8	0.28	0.69
7/20/2021	LCPR	EF1	0.06	0.58	0.02	8.8	13	2.9	2.2	0.15	0.73
7/27/2021	LCPR	EF1	0.04	0.43	0.05	4.5	3	2.9	2.3	0.27	0.70
8/3/2021	LCPR	EF1	0.04	0.37	0.04	4.3	3	3.0	2.5	0.26	0.63
8/10/2021	LCPR	EF1	0.05	0.52	0.06	4.0	4	2.9	2.7	0.19	0.71
8/17/2021	LCPR	EF1	0.04	0.37	0.04	3.3	3	2.9	2.8	0.17	0.54
8/24/2021	LCPR	EF1	0.05	0.56	0.05	4.0	3	2.6	2.7	0.12	0.68
8/31/2021	LCPR	EF1	0.04	0.44	0.06	3.6	6	2.3	3.2	0.08	0.52
9/7/2021	LCPR	EF1	0.04	0.53	0.08	2.8	3	1.9	3.2	0.09	0.62
9/14/2021	LCPR	EF1	0.03	0.49	0.03	3.5	4	1.8	3.4	0.03	0.52
9/21/2021	LCPR	EF1	0.04	0.63	0.10	5.4	9	1.6	3.3	0.07	0.70
9/28/2021	LCPR	EF1	0.04	0.48	0.06	4.5	4	1.6	3.2	0.08	0.56
10/5/2021	LCPR	EF1	0.05	0.51	0.05	4.1	3	2.8	3.1	0.18	0.69

Laboratory Data
Analyzed by
Ouachita Baptist University Water Lab

Water Quality Monitoring
Lake Conway Point Removed
HUC 11110203 PJT# 19-900
Equilibrium, 5019441765

Sample Date	Watershed	Site	TP (mg/L)	TKN (mg/L)	Ammonia-N (mg/L)	Turbidity (NTU)	TSS (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	NO3+NO2-N (mg/L)	TN (mg/L)
10/12/2021	LCPR	EF1	0.04	0.51	0.03	6.3	6	2.8	3.1	0.10	0.61
10/19/2021	LCPR	EF1	0.03	0.40	0.04	3.9	2	3.4	3.1	0.08	0.48
10/26/2021	LCPR	EF1	0.03	0.35	0.02	4.9	5	3.5	2.9	0.07	0.42
11/2/2021	LCPR	EF1	0.03	0.36	<0.02	4.0	2	4.0	3.7	0.03	0.39
11/9/2021	LCPR	EF1	0.03	0.28	<0.02	2.6	2	3.9	3.5	0.04	0.32
11/16/2021	LCPR	EF1	0.03	0.51	<0.02	3.5	2	5.1	3.1	0.02	0.53
11/22/2021	LCPR	EF1	0.03	0.41	<0.02	3.5	4	6.4	3.3	<0.02	NR
11/30/2021	LCPR	EF1	0.03	0.33	<0.02	2.8	1	5.5	3.4	<0.02	NR
12/7/2021	LCPR	EF1	0.03	0.33	<0.02	2.3	1	5.4	3.5	0.02	0.35
12/14/2021	LCPR	EF1	0.02	0.28	<0.02	2.4	2	4.5	3.2	0.02	0.30
12/19/2021	LCPR	EF1	0.06	0.79	0.14	13.9	9	3.5	2.8	0.52	1.31
12/26/2021	LCPR	EF1	0.04	0.48	0.04	6.6	5	4.1	3.2	0.70	1.18
1/4/2022	LCPR	EF1	0.10	0.63	0.05	15.4	10	3.3	2.2	0.59	1.22
1/11/2022	LCPR	EF1	0.06	0.44	0.03	11.0	4	3.8	2.7	0.73	1.17
1/18/2022	LCPR	EF1	0.04	0.32	0.02	9.1	3	4.3	2.8	0.75	1.07
1/25/2022	LCPR	EF1	0.02	0.24	<0.02	6.3	2	4.4	2.9	0.66	0.90
2/1/2022	LCPR	EF1	0.02	0.27	<0.02	5.8	4	4.4	2.9	0.57	0.84
2/8/2022	LCPR	EF1	0.03	0.24	<0.02	5.3	3	4.5	3.1	0.51	0.75
2/15/2022	LCPR	EF1	0.02	0.28	<0.02	4.1	3	4.4	3.3	0.46	0.74
2/21/2022	LCPR	EF1	0.03	0.30	<0.02	7.4	4	4.5	3.2	0.40	0.70
2/28/2022	LCPR	EF1	0.03	0.33	<0.02	8.2	6	4.0	2.6	0.48	0.81
3/7/2022	LCPR	EF1	0.05	0.47	<0.02	16.4	11	4.0	2.2	0.34	0.81
3/14/2022	LCPR	EF1	0.02	0.30	<0.02	6.6	4	4.0	2.5	0.30	0.60
3/21/2022	LCPR	EF1	0.02	0.35	<0.02	4.0	4	4.8	3.1	0.27	0.62
3/28/2022	LCPR	EF1	0.04	0.39	<0.02	9.0	6	3.4	2.1	0.27	0.66
4/4/2022	LCPR	EF1	0.03	0.29	<0.02	6.1	4	3.7	2.3	0.22	0.51
4/11/2022	LCPR	EF1	0.02	0.26	<0.02	5.6	4	3.7	2.3	0.22	0.48
4/18/2022	LCPR	EF1	0.04	0.34	0.02	6.6	5	3.6	2.2	0.21	0.55
4/25/2022	LCPR	EF1	0.06	0.34	<0.02	11.7	12	3.3	1.8	0.19	0.53
5/2/2022	LCPR	EF1	0.05	0.40	0.06	10.3	11	3.7	2.0	0.18	0.58
5/9/2022	LCPR	EF1	0.04	0.31	0.03	8.4	7	3.2	1.8	0.18	0.49
5/16/2022	LCPR	EF1	0.04	0.43	0.05	6.7	6	3.5	2.6	0.22	0.65
5/23/2022	LCPR	EF1	0.08	0.51	<0.02	10.1	10	3.4	2.3	0.24	0.75
5/31/2022	LCPR	EF1	0.04	0.33	0.03	5.5	7	3.5	2.4	0.23	0.56
6/6/2022	LCPR	EF1	0.04	0.31	0.02	6.5	5	8.5	2.3	0.28	0.59
6/13/2022	LCPR	EF1	0.06	0.38	0.04	6.3	8	3.4	2.3	0.23	0.61
6/20/2022	LCPR	EF1	0.04	0.33	0.02	4.4	4	3.9	2.5	0.32	0.65
6/27/2022	LCPR	EF1	0.04	0.43	0.03	3.7	6	3.2	3.0	0.30	0.73
7/5/2022	LCPR	EF1	0.03	0.30	0.03	4.0	4	3.2	2.8	0.13	0.43
7/11/2022	LCPR	EF1	0.04	0.44	0.04	3.6	6	2.8	2.8	0.08	0.52
7/18/2022	LCPR	EF1	0.05	0.46	0.02	7.2	9	2.6	2.9	0.06	0.52
7/25/2022	LCPR	EF1	0.04	0.64	0.06	4.8	6	2.0	3.1	0.03	0.67
8/1/2022	LCPR	EF1	0.04	0.43	0.06	5.4	4	1.9	3.0	0.10	0.53
8/8/2022	LCPR	EF1	0.03	0.52	0.05	4.2	8	1.5	2.4	0.04	0.56
8/15/2022	LCPR	EF1	0.04	0.38	0.03	5.0	9	1.6	2.5	0.03	0.41
8/22/2022	LCPR	EF1	0.03	0.38	0.03	3.3	4	2.9	2.9	0.15	0.53
8/29/2022	LCPR	EF1	0.05	0.45	<0.02	3.9	6	2.4	2.7	0.08	0.53
9/6/2022	LCPR	EF1	0.04	0.44	0.04	3.0	4	2.0	3.2	0.10	0.54
9/12/2022	LCPR	EF1	0.04	0.40	0.03	5.0	7	1.9	3.1	0.04	0.44
9/19/2022	LCPR	EF1	0.03	0.46	0.02	3.3	5	1.9	3.3	<0.02	NR
9/26/2022	LCPR	EF1	0.03	0.39	0.03	3.0	5	1.7	3.3	0.02	0.41
10/3/2022	LCPR	EF1	0.03	0.50	0.03	3.4	4	2.1	3.8	0.04	0.54

Laboratory Data
Analyzed by
Ouachita Baptist University Water Lab

Water Quality Monitoring
Lake Conway Point Removed
HUC 11110203 PJT# 19-900
Equilibrium, 5019441765

Station ID EF2
Stream Name EAST FORK POINT REMOVE CREEK
Site Location CONWAY COUNTY, HWY 95 BRIDGE CROSSING
8 digit HUC 11110203
Lat 35°15'48.52"N
Long 92°43'57.27"W

Minimum Detection and Minimum Reporting Limits

Parameter	TP	TKN	NH3-N	Turbidity	TSS	Sulfate	Chloride	NO_3+NO_2-N
Units	mg/L	mg/L	mg/L	NTU	mg/L	mg/L	mg/L	mg/L
MDL	0.01	0.03	0.01	0.02	0.5	0.15	0.08	0.01
MRL	0.02	0.05	0.02	0.1	1	0.5	0.5	0.02

*NR = not reportable due to either NO3+NO2-N or TKN resulting in less than MRL

Sample Date	Watershed	Site	TP (mg/L)	TKN (mg/L)	Ammonia-N (mg/L)	Turbidity (NTU)	TSS (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	NO3+NO2-N (mg/L)	TN (mg/L)
10/15/2019	LCPR	EF2	0.06	0.47	0.05	9.2	8	3.7	2.8	0.37	0.84
10/22/2019	LCPR	EF2	0.07	0.55	0.08	10.9	10	4.0	3.3	0.49	1.04
10/29/2019	LCPR	EF2	0.04	0.35	0.03	5.9	3	4.1	3.1	0.48	0.83
11/5/2019	LCPR	EF2	0.04	0.31	0.05	4.7	2	4.4	3.3	0.54	0.85
11/12/2019	LCPR	EF2	0.07	0.43	0.02	10.6	4	4.0	2.9	0.73	1.16
11/19/2019	LCPR	EF2	0.04	0.30	0.04	6.2	3	4.2	3.1	0.77	1.07
11/24/2019	LCPR	EF2	0.08	0.47	<0.02	13.8	7	4.2	2.9	0.68	1.15
12/3/2019	LCPR	EF2	0.07	0.42	0.03	11.3	4	3.8	2.6	0.75	1.17
12/10/2019	LCPR	EF2	0.09	0.30	0.03	7.8	4	3.9	2.7	0.78	1.08
12/17/2019	LCPR	EF2	0.03	0.28	0.02	6.6	2	4.0	2.8	0.75	1.03
12/31/2019	LCPR	EF2	0.05	0.52	<0.02	10.5	7	4.4	3.1	0.61	1.13
1/6/2020	LCPR	EF2	0.03	0.33	0.02	8.6	4	4.4	3.3	0.73	1.06
1/14/2020	LCPR	EF2	0.12	0.74	0.05	27.0	14	3.5	2.3	0.75	1.49
1/21/2020	LCPR	EF2	0.05	0.38	0.04	12.8	5	3.8	2.4	0.72	1.10
1/28/2020	LCPR	EF2	0.05	0.26	0.02	10.2	6	3.9	2.8	0.81	1.07
2/4/2020	LCPR	EF2	0.04	0.30	0.02	9.3	8	4.3	2.9	0.74	1.04
2/11/2020	LCPR	EF2	0.04	0.40	0.02	10.6	8	4.2	3.0	0.79	1.19
2/18/2020	LCPR	EF2	0.06	0.47	0.03	15.6	12	3.8	2.6	0.79	1.26
2/25/2020	LCPR	EF2	0.04	0.33	<0.02	11.1	8	4.1	2.8	0.72	1.05
3/3/2020	LCPR	EF2	0.04	0.42	<0.02	7.4	12	4.7	3.2	0.60	1.02
3/10/2020	LCPR	EF2	0.04	0.50	0.03	6.7	8	4.3	3.1	0.57	1.07
3/17/2020	LCPR	EF2	0.10	0.65	0.06	19.9	13	3.6	2.4	0.63	1.28
3/24/2020	LCPR	EF2	0.06	0.43	0.03	13.1	7	3.7	2.4	0.61	1.04
3/31/2020	LCPR	EF2	0.15	0.83	0.05	33.8	67	2.9	2.1	0.42	1.25
4/7/2020	LCPR	EF2	0.05	0.52	0.03	7.2	7	3.5	2.2	0.46	0.98
4/13/2020	LCPR	EF2	0.14	0.83	0.13	21.0	20	NR	NR	NR	NR
4/21/2020	LCPR	EF2	0.06	0.49	0.03	7.8	10	3.9	2.4	0.48	0.97
4/28/2020	LCPR	EF2	0.06	0.55	0.05	10.0	13	3.8	2.7	0.51	1.06
5/5/2020	LCPR	EF2	0.08	0.58	0.07	10.1	13	3.4	2.7	0.49	1.07
5/12/2020	LCPR	EF2	0.07	0.53	0.04	9.2	13	3.7	2.9	0.51	1.04
5/19/2020	LCPR	EF2	0.13	0.84	0.08	14.6	18	3.1	2.2	0.44	1.28
5/26/2020	LCPR	EF2	0.13	0.84	0.09	17.8	49	3.0	2.2	0.35	1.19
6/2/2020	LCPR	EF2	0.07	0.60	0.05	12.6	11	3.0	2.1	0.30	0.90
6/9/2020	LCPR	EF2	0.13	0.61	0.05	16.6	32	3.0	2.4	0.37	0.98
6/16/2020	LCPR	EF2	0.08	0.50	0.05	9.6	16	3.4	2.6	0.36	0.86
6/23/2020	LCPR	EF2	0.07	0.45	0.07	8.6	7	3.3	2.7	0.40	0.85
6/30/2020	LCPR	EF2	0.07	0.53	0.09	7.2	12	3.0	2.9	0.39	0.92
7/6/2020	LCPR	EF2	0.11	0.66	0.05	13.4	16	3.7	2.7	0.36	1.02
7/13/2020	LCPR	EF2	0.12	0.61	0.07	7.2	16	3.9	3.6	0.29	0.90
7/20/2020	LCPR	EF2	0.10	0.63	0.12	9.3	11	3.2	2.8	0.20	0.83
7/27/2020	LCPR	EF2	0.11	0.78	0.19	8.3	9	2.8	2.9	0.16	0.94
8/3/2020	LCPR	EF2	0.09	0.69	0.10	11.1	12	2.7	2.7	0.16	0.85
8/10/2020	LCPR	EF2	0.10	0.79	0.13	8.9	8	2.4	3.0	0.11	0.90
8/17/2020	LCPR	EF2	0.12	0.74	0.09	10.2	14	2.9	3.4	0.27	1.01
8/24/2020	LCPR	EF2	0.11	0.81	0.17	8.9	9	2.9	3.5	0.18	0.99
8/31/2020	LCPR	EF2	0.17	1.09	0.06	16.0	33	2.8	3.7	0.31	1.40
9/6/2020	LCPR	EF2	0.09	0.64	0.03	7.8	13	3.3	2.5	0.53	1.17
9/14/2020	LCPR	EF2	0.06	0.49	0.04	6.1	8	3.5	3.0	0.38	0.87
9/21/2020	LCPR	EF2	0.06	0.48	0.05	7.5	10	3.4	3.1	0.25	0.73
9/28/2020	LCPR	EF2	0.05	0.54	0.04	6.7	8	3.5	3.2	0.31	0.85
10/5/2020	LCPR	EF2	0.05	0.48	0.06	7.0	7	3.6	3.7	0.29	0.77

Laboratory Data
Analyzed by
Ouachita Baptist University Water Lab

Water Quality Monitoring
Lake Conway Point Removed
HUC 11110203 PJT# 19-900
Equilibrium, 5019441765

Sample Date	Watershed	Site	TP (mg/L)	TKN (mg/L)	Ammonia-N (mg/L)	Turbidity (NTU)	TSS (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	NO3+NO2-N (mg/L)	TN (mg/L)
10/12/2020	LCPR	EF2	0.06	0.57	0.08	7.7	8	3.3	3.5	0.18	0.75
10/19/2020	LCPR	EF2	0.07	0.58	0.09	4.7	7	3.3	3.8	0.18	0.76
10/26/2020	LCPR	EF2	0.08	0.57	0.13	10.1	12	3.3	4.3	0.10	0.67
11/2/2020	LCPR	EF2	0.05	0.57	0.07	4.6	4	3.5	4.1	0.29	0.86
11/10/2020	LCPR	EF2	0.06	0.56	0.02	6.7	13	3.4	3.7	0.12	0.68
11/17/2020	LCPR	EF2	0.04	0.47	<0.02	3.6	5	3.5	4.0	<0.02	NR
11/21/2020	LCPR	EF2	0.06	0.57	<0.02	5.8	13	3.3	3.9	0.02	0.59
12/1/2020	LCPR	EF2	0.03	0.49	0.03	5.1	3	4.1	3.8	0.37	0.86
12/8/2020	LCPR	EF2	0.03	0.40	0.02	4.8	7	4.2	4.1	0.41	0.81
12/15/2020	LCPR	EF2	0.05	0.63	0.10	12.8	7	4.7	4.2	0.51	1.14
12/21/2020	LCPR	EF2	0.04	0.33	<0.02	6.8	4	4.5	4.1	0.64	0.97
12/28/2020	LCPR	EF2	0.02	0.32	<0.02	5.1	4	4.5	4.2	0.61	0.93
1/5/2021	LCPR	EF2	0.07	0.46	0.03	14.3	6	4.2	3.5	0.79	1.25
1/12/2021	LCPR	EF2	0.05	0.43	0.10	9.6	6	4.5	3.8	0.84	1.27
1/19/2021	LCPR	EF2	0.03	0.28	0.02	6.4	3	4.5	3.9	0.79	1.07
1/26/2021	LCPR	EF2	0.08	0.68	0.02	29.0	24	4.4	3.8	0.71	1.39
2/2/2021	LCPR	EF2	0.05	0.39	0.02	10.5	5	4.4	3.2	0.67	1.06
2/9/2021	LCPR	EF2	0.03	0.27	<0.02	6.8	3	4.5	3.6	0.69	0.96
2/23/2021	LCPR	EF2	0.04	0.35	0.02	8.1	8	4.9	4.0	0.66	1.01
3/2/2021	LCPR	EF2	0.12	0.75	0.05	29.1	18	4.0	3.0	0.67	1.42
3/8/2021	LCPR	EF2	0.05	0.39	<0.02	12.2	6	4.2	3.2	0.66	1.05
3/16/2021	LCPR	EF2	0.07	0.64	0.02	16.9	13	4.4	3.6	0.62	1.26
3/23/2021	LCPR	EF2	0.07	0.68	0.05	20.8	20	3.8	3.2	0.47	1.15
3/30/2021	LCPR	EF2	0.05	0.49	0.03	10.4	11	3.8	2.9	0.41	0.90
4/6/2021	LCPR	EF2	0.06	0.72	0.04	6.1	14	3.8	3.0	0.31	1.03
4/13/2021	LCPR	EF2	0.12	0.65	0.08	110.0	102	4.1	3.1	0.34	0.99
4/20/2021	LCPR	EF2	0.06	0.48	0.03	7.4	10	4.0	3.3	0.30	0.78
4/27/2021	LCPR	EF2	0.06	0.49	0.02	12.0	10	4.0	3.0	0.28	0.77
5/4/2021	LCPR	EF2	0.26	1.13	0.09	46.4	67	3.3	2.4	0.35	1.48
5/11/2021	LCPR	EF2	0.08	0.49	0.04	14.1	13	3.6	2.7	0.44	0.93
5/18/2021	LCPR	EF2	0.15	0.84	0.07	21.7	34	3.5	3.2	0.46	1.30
5/25/2021	LCPR	EF2	0.09	0.45	0.03	10.1	10	3.5	2.4	0.42	0.87
6/1/2021	LCPR	EF2	0.07	0.51	0.04	11.5	12	3.4	2.6	0.45	0.96
6/8/2021	LCPR	EF2	0.14	0.75	0.07	21.5	25	3.0	2.4	0.38	1.13
6/15/2021	LCPR	EF2	0.09	0.50	0.05	13.8	24	3.0	2.3	0.31	0.81
6/22/2021	LCPR	EF2	0.08	0.46	0.06	11.7	17	3.1	2.4	0.35	0.81
6/29/2021	LCPR	EF2	0.09	0.57	0.07	12.0	16	3.1	2.6	0.36	0.93
7/6/2021	LCPR	EF2	0.09	0.51	0.11	12.4	13	2.9	2.6	0.31	0.82
7/13/2021	LCPR	EF2	0.10	0.71	0.10	10.6	13	2.8	2.9	0.29	1.00
7/20/2021	LCPR	EF2	0.08	0.60	0.03	10.6	17	3.0	2.4	0.21	0.81
7/27/2021	LCPR	EF2	0.09	0.54	0.10	10.5	11	2.6	2.5	0.18	0.72
8/3/2021	LCPR	EF2	0.12	0.61	0.03	14.1	18	2.5	2.7	0.16	0.77
8/10/2021	LCPR	EF2	0.09	0.65	0.15	8.2	10	2.5	3.1	0.16	0.81
8/17/2021	LCPR	EF2	0.12	0.91	0.10	8.2	12	1.9	3.3	0.06	0.97
8/24/2021	LCPR	EF2	0.12	0.89	0.25	8.0	10	1.7	3.4	0.04	0.93
8/31/2021	LCPR	EF2	0.11	0.99	0.50	9.8	13	1.5	3.4	0.02	1.01
9/7/2021	LCPR	EF2	0.13	0.99	0.24	14.0	17	1.5	3.5	0.05	1.04
9/14/2021	LCPR	EF2	0.09	0.87	0.02	12.2	14	1.8	3.9	0.02	0.89
9/21/2021	LCPR	EF2	0.12	1.51	0.49	22.6	31	1.1	3.7	0.04	1.55
9/28/2021	LCPR	EF2	0.15	1.05	0.50	16.1	14	1.7	4.2	0.06	1.11
10/5/2021	LCPR	EF2	0.14	1.54	0.75	7.6	12	2.2	3.6	0.03	1.57

Laboratory Data
Analyzed by
Ouachita Baptist University Water Lab

Water Quality Monitoring
Lake Conway Point Removed
HUC 11110203 PJT# 19-900
Equilibrium, 5019441765

Sample Date	Watershed	Site	TP (mg/L)	TKN (mg/L)	Ammonia-N (mg/L)	Turbidity (NTU)	TSS (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	NO3+NO2-N (mg/L)	TN (mg/L)
10/12/2021	LCPR	EF2	0.13	0.98	0.36	10.7	10	1.5	3.1	0.03	1.01
10/19/2021	LCPR	EF2	0.10	1.05	0.47	8.9	8	1.4	2.9	0.02	1.07
10/26/2021	LCPR	EF2	0.12	1.41	0.55	17.6	20	1.7	3.3	0.12	1.53
11/2/2021	LCPR	EF2	0.06	0.60	0.11	8.2	9	1.6	2.6	0.05	0.65
11/9/2021	LCPR	EF2	0.06	0.56	0.16	5.3	6	2.0	3.0	0.07	0.63
11/16/2021	LCPR	EF2	0.05	0.46	0.04	4.4	3	1.9	2.8	0.04	0.50
11/22/2021	LCPR	EF2	0.05	0.45	<0.02	3.0	6	2.2	3.2	0.02	0.47
11/30/2021	LCPR	EF2	0.05	0.40	<0.02	3.2	2	2.3	3.2	0.02	0.42
12/7/2021	LCPR	EF2	0.08	0.61	0.03	11.9	17	2.0	3.1	0.02	0.63
12/14/2021	LCPR	EF2	0.04	0.39	0.04	3.6	4	1.9	2.9	0.02	0.41
12/19/2021	LCPR	EF2	0.10	1.05	0.26	24.0	22	3.5	3.3	0.39	1.44
12/26/2021	LCPR	EF2	0.06	0.77	0.12	11.8	18	3.7	3.7	0.76	1.53
1/4/2022	LCPR	EF2	0.12	0.81	0.09	21.5	17	3.6	2.8	0.83	1.64
1/11/2022	LCPR	EF2	0.09	0.52	0.06	14.1	7	4.0	3.3	1.06	1.58
1/18/2022	LCPR	EF2	0.06	0.39	0.03	10.5	8	4.6	3.6	1.10	1.49
1/25/2022	LCPR	EF2	0.03	0.26	<0.02	6.6	2	4.4	3.6	1.02	1.28
2/1/2022	LCPR	EF2	0.03	0.30	<0.02	6.8	7	6.5	3.8	0.89	1.19
2/8/2022	LCPR	EF2	0.03	0.29	<0.02	5.4	5	4.6	3.9	0.80	1.09
2/15/2022	LCPR	EF2	0.03	0.32	<0.02	5.1	5	4.5	4.2	0.65	0.97
2/21/2022	LCPR	EF2	0.04	0.38	<0.02	7.7	8	4.9	3.8	0.55	0.93
2/28/2022	LCPR	EF2	0.06	0.93	0.03	8.7	9	4.1	3.2	0.78	1.71
3/7/2022	LCPR	EF2	0.06	0.51	<0.02	10.3	19	3.9	3.1	0.61	1.12
3/14/2022	LCPR	EF2	0.03	0.31	<0.02	6.1	5	4.0	3.0	0.48	0.79
3/21/2022	LCPR	EF2	0.04	0.39	<0.02	4.2	11	3.9	3.3	0.38	0.77
3/28/2022	LCPR	EF2	0.05	0.49	<0.02	8.8	7	3.4	2.4	0.43	0.92
4/4/2022	LCPR	EF2	0.04	0.39	<0.02	6.7	12	3.6	2.7	0.35	0.74
4/11/2022	LCPR	EF2	0.03	0.32	<0.02	5.4	8	3.8	2.9	0.33	0.65
4/18/2022	LCPR	EF2	0.05	0.44	0.03	8.5	8	3.6	2.7	0.40	0.84
4/25/2022	LCPR	EF2	0.09	0.50	<0.02	11.9	19	3.3	2.2	0.37	0.87
5/2/2022	LCPR	EF2	0.05	0.35	0.04	8.8	12	3.4	2.4	0.31	0.66
5/9/2022	LCPR	EF2	0.05	0.34	0.02	9.5	7	3.2	2.1	0.32	0.66
5/16/2022	LCPR	EF2	0.13	0.73	0.09	9.4	25	4.2	3.2	0.46	1.19
5/23/2022	LCPR	EF2	0.09	0.56	0.05	14.6	19	3.3	2.4	0.35	0.91
5/31/2022	LCPR	EF2	0.04	0.35	0.03	11.8	19	3.5	2.8	0.27	0.62
6/6/2022	LCPR	EF2	0.07	0.44	0.06	8.7	12	3.4	2.8	0.37	0.81
6/13/2022	LCPR	EF2	0.07	0.54	0.06	7.6	14	3.3	3.1	0.34	0.88
6/20/2022	LCPR	EF2	0.07	0.54	0.10	8.2	9	3.1	3.2	0.25	0.79
6/27/2022	LCPR	EF2	0.09	0.58	0.12	9.0	15	3.2	3.8	0.20	0.78
7/5/2022	LCPR	EF2	0.11	0.79	0.11	7.0	9	2.6	3.6	0.12	0.91
7/11/2022	LCPR	EF2	0.14	0.99	<0.02	7.8	21	2.2	4.4	0.04	1.03
7/18/2022	LCPR	EF2	0.11	0.97	0.39	8.8	11	1.8	4.4	0.04	1.01
7/25/2022	LCPR	EF2	0.16	1.41	0.10	17.6	30	1.8	4.4	0.05	1.46
8/1/2022	LCPR	EF2	0.11	1.78	1.07	10.6	10	1.7	5.5	0.04	1.82
8/8/2022	LCPR	EF2	0.16	1.96	0.40	15.4	25	1.6	5.0	0.05	2.01
8/15/2022	LCPR	EF2	0.11	1.42	0.55	11.1	30	1.1	5.7	0.04	1.46
8/22/2022	LCPR	EF2	0.12	1.52	0.75	6.6	6	1.5	4.3	0.03	1.55
8/29/2022	LCPR	EF2	0.09	0.84	0.30	7.5	12	1.4	3.3	0.06	0.90
9/6/2022	LCPR	EF2	0.10	1.39	0.72	6.7	13	1.1	3.9	0.03	1.42
9/12/2022	LCPR	EF2	0.08	1.24	0.68	8.5	16	1.0	3.8	0.02	1.26
9/19/2022	LCPR	EF2	0.19	1.86	0.10	15.5	27	0.6	4.0	0.06	1.92
9/26/2022	LCPR	EF2	0.11	0.87	<0.02	19.0	23	<0.5	4.0	<0.02	NR
10/3/2022	LCPR	EF2	0.20	1.98	<0.02	21.9	28	<0.5	4.3	0.02	2.00

Laboratory Data
Analyzed by
Ouachita Baptist University Water Lab

Water Quality Monitoring
Lake Conway Point Removed
HUC 11110203 PJT# 19-900
Equilibrium, 5019441765

Station ID GL
Stream Name Gum Log Creek
Site Location POPE COUNTY, AT AR HWY 247 BRIDGE CROSSING
8 digit HUC 11110203
Lat 35°17'12.45"N
Long 92°54'41.00"W

Minimum Detection and Minimum Reporting Limits

Parameter	TP	TKN	NH3-N	Turbidity	TSS	Sulfate	Chloride	NO_3+NO_2-N
Units	mg/L	mg/L	mg/L	NTU	mg/L	mg/L	mg/L	mg/L
MDL	0.01	0.03	0.01	0.02	0.5	0.15	0.08	0.01
MRL	0.02	0.05	0.02	0.1	1	0.5	0.5	0.02

*NR = not reportable due to either NO3+NO2-N or TKN resulting in less than MRL

Sample Date	Watershed	Site	TP (mg/L)	TKN (mg/L)	Ammonia-N (mg/L)	Turbidity (NTU)	TSS (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	NO3+NO2-N (mg/L)	TN (mg/L)
10/15/2019	LCPR	GL	0.05	0.43	0.05	10.6	6	18.6	4.1	0.76	1.19
10/22/2019	LCPR	GL	0.08	0.69	0.05	22.3	11	20.4	4.8	0.82	1.51
10/29/2019	LCPR	GL	0.05	0.34	0.04	9.0	5	14.8	4.4	0.66	1.00
11/5/2019	LCPR	GL	0.05	0.26	0.04	7.6	4	14.4	4.4	0.89	1.15
11/12/2019	LCPR	GL	0.10	0.56	0.03	14.0	5	11.7	4.0	1.04	1.60
11/19/2019	LCPR	GL	0.04	0.33	0.04	6.3	2	12.9	3.9	1.12	1.45
11/24/2019	LCPR	GL	0.07	0.46	0.03	11.1	7	10.1	3.6	0.98	1.44
12/3/2019	LCPR	GL	0.06	0.31	0.02	9.5	4	8.8	3.1	1.08	1.39
12/10/2019	LCPR	GL	0.05	0.31	0.06	8.0	3	9.6	3.6	1.03	1.34
12/17/2019	LCPR	GL	0.03	0.24	0.05	7.0	3	11.0	4.1	0.99	1.23
12/31/2019	LCPR	GL	0.06	0.58	0.03	11.2	4	9.7	3.9	0.83	1.41
1/6/2020	LCPR	GL	0.03	0.30	0.02	8.1	2	15.6	4.3	0.84	1.14
1/14/2020	LCPR	GL	0.06	0.41	0.03	17.6	11	8.3	3.1	1.06	1.47
1/21/2020	LCPR	GL	0.04	0.25	0.03	9.2	4	9.5	3.8	1.08	1.33
1/28/2020	LCPR	GL	0.04	0.28	0.03	9.3	4	9.1	3.8	1.05	1.33
2/4/2020	LCPR	GL	0.04	0.24	0.02	10.1	5	9.1	4.0	1.01	1.25
2/11/2020	LCPR	GL	0.06	0.42	0.02	13.1	7	9.3	4.4	0.89	1.31
2/18/2020	LCPR	GL	0.24	1.12	0.05	82.5	97	6.6	3.2	0.84	1.96
2/25/2020	LCPR	GL	0.05	0.36	0.02	12.0	7	8.1	3.5	0.88	1.24
3/3/2020	LCPR	GL	0.03	0.27	0.02	8.6	4	9.1	3.9	0.91	1.18
3/10/2020	LCPR	GL	0.04	0.36	0.03	8.0	4	9.7	4.6	0.78	1.14
3/17/2020	LCPR	GL	0.06	0.49	0.02	16.8	11	7.5	3.1	0.76	1.25
3/24/2020	LCPR	GL	0.26	1.27	0.06	110.0	173	7.3	2.5	0.62	1.89
3/31/2020	LCPR	GL	0.24	0.97	0.06	53.8	81	3.6	1.8	0.33	1.30
4/7/2020	LCPR	GL	0.06	0.33	0.03	9.2	8	8.1	2.8	0.67	1.00
4/13/2020	LCPR	GL	0.11	0.64	0.03	25.3	28	NR	NR	NR	NR
4/21/2020	LCPR	GL	0.05	0.46	0.03	9.6	7	8.1	3.6	0.53	0.99
4/28/2020	LCPR	GL	0.05	0.43	0.03	9.9	7	7.6	2.9	0.56	0.99
5/5/2020	LCPR	GL	0.09	0.65	0.04	22.0	31	8.6	2.9	0.56	1.21
5/12/2020	LCPR	GL	0.06	0.44	0.05	12.1	11	9.7	5.0	0.53	0.97
5/19/2020	LCPR	GL	0.06	0.46	0.04	16.2	22	7.5	2.5	0.53	0.99
5/26/2020	LCPR	GL	0.08	0.91	0.05	14.7	18	6.9	3.2	0.36	1.27
6/2/2020	LCPR	GL	0.05	0.49	0.05	10.6	8	9.6	3.7	0.42	0.91
6/9/2020	LCPR	GL	0.24	1.22	0.12	37.2	58	9.8	3.5	0.39	1.61
6/16/2020	LCPR	GL	0.05	0.34	0.05	8.1	5	12.9	3.6	0.42	0.76
6/23/2020	LCPR	GL	0.05	0.60	0.07	9.1	7	10.0	4.7	0.34	0.94
6/30/2020	LCPR	GL	0.04	0.43	0.09	5.8	7	9.6	6.9	0.22	0.65
7/6/2020	LCPR	GL	0.04	0.42	0.06	5.7	5	7.3	4.5	0.18	0.60
7/13/2020	LCPR	GL	0.04	0.39	0.06	5.4	6	10.1	4.5	0.20	0.59
7/20/2020	LCPR	GL	0.04	0.45	0.09	5.2	4	12.7	7.2	0.08	0.53
7/27/2020	LCPR	GL	0.04	0.46	0.08	6.3	4	22.5	3.5	0.15	0.61
8/3/2020	LCPR	GL	0.05	0.58	0.08	7.1	5	16.2	3.9	0.16	0.74
8/10/2020	LCPR	GL	0.05	0.65	0.10	7.0	4	6.7	7.3	0.09	0.74
8/17/2020	LCPR	GL	0.05	0.43	0.08	5.2	4	15.2	5.0	0.08	0.51
8/24/2020	LCPR	GL	0.05	0.47	0.11	6.0	4	14.4	4.5	0.09	0.56
8/31/2020	LCPR	GL	0.17	0.82	0.10	17.7	14	15.1	3.2	0.43	1.25
9/6/2020	LCPR	GL	0.07	0.50	0.02	13.1	10	17.3	3.3	0.91	1.41
9/14/2020	LCPR	GL	0.04	0.40	0.03	7.2	5	18.1	4.3	0.65	1.05
9/21/2020	LCPR	GL	0.04	0.32	0.03	8.1	5	17.0	3.5	0.44	0.76
9/28/2020	LCPR	GL	0.05	0.41	0.02	9.3	9	14.6	4.4	0.44	0.85
10/5/2020	LCPR	GL	0.06	0.40	0.03	7.1	6	16.2	4.4	0.42	0.82

Laboratory Data
Analyzed by
Ouachita Baptist University Water Lab

Water Quality Monitoring
Lake Conway Point Removed
HUC 11110203 PJT# 19-900
Equilibrium, 5019441765

Sample Date	Watershed	Site	TP (mg/L)	TKN (mg/L)	Ammonia-N (mg/L)	Turbidity (NTU)	TSS (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	NO3+NO2-N (mg/L)	TN (mg/L)
10/12/2020	LCPR	GL	0.04	0.31	0.02	5.0	5	19.0	4.1	0.28	0.59
10/19/2020	LCPR	GL	0.05	0.37	0.02	6.1	5	14.9	8.9	<0.02	NR
10/26/2020	LCPR	GL	0.04	0.36	0.03	3.9	4	13.2	5.1	0.07	0.43
11/2/2020	LCPR	GL	0.06	0.44	<0.02	13.7	8	20.7	4.7	0.70	1.14
11/10/2020	LCPR	GL	0.04	0.32	<0.02	3.8	5	17.0	6.1	0.33	0.65
11/17/2020	LCPR	GL	0.04	0.24	<0.02	3.7	4	13.7	5.7	0.04	0.28
11/21/2020	LCPR	GL	0.03	0.26	0.02	3.8	5	16.2	5.6	0.13	0.39
12/1/2020	LCPR	GL	0.04	0.42	0.02	7.1	2	15.4	5.0	0.56	0.98
12/8/2020	LCPR	GL	0.04	0.30	0.02	7.2	4	12.8	5.3	0.57	0.87
12/15/2020	LCPR	GL	0.08	0.56	0.02	19.6	8	10.8	4.7	0.89	1.45
12/21/2020	LCPR	GL	0.04	0.25	<0.02	7.6	3	12.7	4.8	0.85	1.10
12/28/2020	LCPR	GL	0.03	0.23	<0.02	8.6	5	13.5	4.9	0.71	0.94
1/5/2021	LCPR	GL	0.06	0.33	0.02	13.1	6	10.7	3.9	1.05	1.38
1/12/2021	LCPR	GL	0.06	0.38	0.11	15.7	6	10.2	3.6	0.95	1.33
1/19/2021	LCPR	GL	0.04	0.22	0.02	7.3	3	11.8	4.1	0.92	1.14
1/26/2021	LCPR	GL	0.13	0.72	0.03	34.8	20	8.0	3.5	0.64	1.36
2/2/2021	LCPR	GL	0.05	0.31	0.02	12.0	8	10.2	3.6	0.82	1.13
2/9/2021	LCPR	GL	0.04	0.25	0.02	8.1	7	10.5	4.5	0.76	1.01
2/23/2021	LCPR	GL	0.07	0.51	0.02	23.6	16	10.0	5.2	0.63	1.14
3/2/2021	LCPR	GL	0.06	0.47	0.03	21.7	16	6.9	3.2	0.71	1.18
3/8/2021	LCPR	GL	0.04	0.29	<0.02	10.1	5	10.2	4.9	0.72	1.01
3/16/2021	LCPR	GL	0.10	0.60	0.03	17.9	12	8.4	4.2	0.56	1.16
3/23/2021	LCPR	GL	0.14	0.81	0.04	35.8	69	6.8	3.2	0.48	1.29
3/30/2021	LCPR	GL	0.05	0.37	0.02	10.4	9	8.0	3.3	0.59	0.96
4/6/2021	LCPR	GL	0.05	0.47	0.02	8.2	7	9.0	3.7	0.46	0.93
4/13/2021	LCPR	GL	0.05	0.42	0.06	9.1	7	9.8	5.5	0.46	0.88
4/20/2021	LCPR	GL	0.06	0.49	0.03	9.7	9	8.6	3.9	0.48	0.97
4/27/2021	LCPR	GL	0.07	0.59	0.05	13.0	9	7.9	3.6	0.48	1.07
5/4/2021	LCPR	GL	0.38	0.67	0.09	145.0	203	4.4	2.4	0.33	1.00
5/11/2021	LCPR	GL	0.05	0.36	0.03	12.3	9	10.0	3.6	0.49	0.85
5/18/2021	LCPR	GL	0.12	0.63	0.04	19.5	18	7.6	3.5	0.40	1.03
5/25/2021	LCPR	GL	0.06	0.43	0.04	11.7	11	8.8	3.2	0.51	0.94
6/1/2021	LCPR	GL	0.09	0.48	0.04	32.0	54	8.4	2.3	0.42	0.90
6/8/2021	LCPR	GL	0.11	0.54	0.03	17.2	19	6.3	3.0	0.33	0.87
6/15/2021	LCPR	GL	0.06	0.47	0.08	10.6	8	10.6	3.1	0.45	0.92
6/22/2021	LCPR	GL	0.05	0.42	0.05	8.8	10	13.8	3.5	0.49	0.91
6/29/2021	LCPR	GL	0.06	0.49	0.09	13.5	10	12.1	8.0	0.40	0.89
7/6/2021	LCPR	GL	0.05	0.40	0.05	8.8	9	16.2	3.9	0.38	0.78
7/13/2021	LCPR	GL	0.07	0.55	0.07	6.5	9	10.6	8.4	0.31	0.86
7/20/2021	LCPR	GL	0.11	0.67	0.06	11.2	12	9.4	3.9	0.39	1.06
7/27/2021	LCPR	GL	0.04	0.45	0.07	5.6	5	19.7	5.0	0.13	0.58
8/3/2021	LCPR	GL	0.05	0.52	0.09	7.6	7	17.2	6.3	0.04	0.56
8/10/2021	LCPR	GL	0.08	0.53	0.08	8.9	8	10.6	8.4	0.06	0.59
8/17/2021	LCPR	GL	0.07	0.51	0.10	7.5	5	7.5	9.4	0.04	0.55
8/24/2021	LCPR	GL	0.09	0.52	0.10	7.5	7	4.6	4.3	0.03	0.55
8/31/2021	LCPR	GL	0.11	0.63	0.22	26.4	15	2.7	4.9	0.03	0.66
9/7/2021	LCPR	GL	0.10	0.76	0.17	9.7	9	2.3	5.3	0.02	0.78
9/14/2021	LCPR	GL	0.13	0.77	0.41	51.0	11	0.8	4.8	<0.02	NR
9/21/2021	LCPR	GL	0.13	0.81	0.12	17.3	15	1.7	4.6	0.05	0.86
9/28/2021	LCPR	GL	0.08	0.61	0.15	10.1	6	1.8	4.4	0.04	0.65
10/5/2021	LCPR	GL	0.09	0.62	0.12	8.7	7	1.9	4.8	0.02	0.64

Laboratory Data
Analyzed by
Ouachita Baptist University Water Lab

Water Quality Monitoring
Lake Conway Point Removed
HUC 11110203 PJT# 19-900
Equilibrium, 5019441765

Sample Date	Watershed	Site	TP (mg/L)	TKN (mg/L)	Ammonia-N (mg/L)	Turbidity (NTU)	TSS (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	NO3+NO2-N (mg/L)	TN (mg/L)
10/12/2021	LCPR	GL	0.10	0.70	0.07	12.5	7	1.5	5.5	0.08	0.78
10/19/2021	LCPR	GL	0.11	0.66	0.28	21.6	2	1.0	5.7	0.12	0.78
10/26/2021	LCPR	GL	0.12	0.68	0.18	17.7	11	1.1	4.7	0.05	0.73
11/2/2021	LCPR	GL	0.10	0.61	0.10	13.9	8	1.0	4.0	<0.02	NR
11/9/2021	LCPR	GL	0.10	0.51	0.09	12.5	4	1.4	4.0	0.02	0.53
11/16/2021	LCPR	GL	0.11	0.58	<0.02	14.0	9	1.8	3.7	<0.02	NR
11/22/2021	LCPR	GL	0.13	0.62	<0.02	13.4	20	2.1	3.6	<0.02	NR
11/30/2021	LCPR	GL	0.14	0.53	<0.02	11.7	18	3.3	4.3	<0.02	NR
12/7/2021	LCPR	GL	0.13	0.64	<0.02	9.6	16	1.9	4.4	<0.02	NR
12/14/2021	LCPR	GL	0.09	0.48	<0.02	8.1	10	2.8	4.7	0.02	0.50
12/19/2021	LCPR	GL	0.06	0.48	<0.02	17.4	8	43.7	3.8	0.24	0.72
12/26/2021	LCPR	GL	0.05	0.44	0.02	9.4	6	21.7	5.5	1.19	1.63
1/4/2022	LCPR	GL	0.07	0.46	0.04	14.9	9	16.3	4.1	1.98	2.44
1/11/2022	LCPR	GL	0.06	0.40	0.04	11.4	5	13.5	4.3	1.68	2.08
1/18/2022	LCPR	GL	0.05	0.36	0.02	10.4	4	12.9	4.4	1.48	1.84
1/25/2022	LCPR	GL	0.03	0.33	0.02	7.1	2	15.5	5.0	1.34	1.67
2/1/2022	LCPR	GL	0.03	0.25	<0.02	8.3	6	16.4	4.8	1.09	1.34
2/8/2022	LCPR	GL	0.04	0.34	<0.02	8.5	4	13.4	5.9	1.18	1.52
2/15/2022	LCPR	GL	0.02	0.27	<0.02	6.0	4	14.5	5.3	0.93	1.20
2/21/2022	LCPR	GL	0.04	0.35	0.02	8.5	6	12.4	4.4	0.81	1.16
2/28/2022	LCPR	GL	0.06	0.42	<0.02	9.4	7	9.0	3.1	1.02	1.44
3/7/2022	LCPR	GL	0.09	0.76	0.03	41.5	47	12.7	3.8	0.85	1.61
3/14/2022	LCPR	GL	0.03	0.38	<0.02	6.6	5	10.5	3.6	0.72	1.10
3/21/2022	LCPR	GL	0.03	0.44	<0.02	5.8	8	10.7	3.7	0.45	0.89
3/28/2022	LCPR	GL	0.04	0.47	<0.02	7.3	7	9.6	3.3	0.58	1.05
4/4/2022	LCPR	GL	0.04	0.44	<0.02	7.5	8	9.5	3.9	0.43	0.87
4/11/2022	LCPR	GL	0.03	0.34	<0.02	6.3	4	9.6	3.2	0.48	0.82
4/18/2022	LCPR	GL	0.05	0.37	<0.02	9.7	8	8.5	3.0	0.50	0.87
4/25/2022	LCPR	GL	0.28	1.19	0.03	106.0	191	4.4	2.1	0.32	1.51
5/2/2022	LCPR	GL	0.06	0.51	0.05	16.1	21	8.8	2.6	0.44	0.95
5/9/2022	LCPR	GL	0.06	0.31	0.02	13.1	9	8.6	2.5	0.41	0.72
5/16/2022	LCPR	GL	0.15	0.71	0.06	34.4	40	6.6	3.0	0.33	1.04
5/23/2022	LCPR	GL	0.05	0.39	0.05	8.6	7	11.7	3.1	0.43	0.82
5/31/2022	LCPR	GL	0.05	0.32	0.04	8.7	7	13.7	3.7	0.32	0.64
6/6/2022	LCPR	GL	0.05	0.34	0.06	11.3	9	16.3	4.5	0.37	0.71
6/13/2022	LCPR	GL	0.08	0.45	0.05	13.0	13	9.9	3.9	0.42	0.87
6/20/2022	LCPR	GL	0.06	0.39	0.08	10.4	8	12.9	4.1	0.38	0.77
6/27/2022	LCPR	GL	0.05	0.43	0.07	6.9	8	11.0	4.0	0.18	0.61
7/5/2022	LCPR	GL	0.05	0.38	0.07	6.6	5	8.5	7.4	0.12	0.50
7/11/2022	LCPR	GL	0.06	0.51	0.07	6.6	8	5.8	4.4	0.08	0.59
7/18/2022	LCPR	GL	0.09	0.65	0.03	144.0	27	4.3	4.9	0.11	0.76
7/25/2022	LCPR	GL	0.08	0.62	0.05	7.5	11	2.2	4.9	0.02	0.64
8/1/2022	LCPR	GL	0.07	0.50	0.11	11.8	9	3.8	3.8	0.15	0.65
8/8/2022	LCPR	GL	0.06	0.52	0.06	8.4	5	2.2	3.7	0.04	0.56
8/15/2022	LCPR	GL	0.06	0.49	0.06	13.5	9	2.3	6.8	0.04	0.53
8/22/2022	LCPR	GL	0.06	0.54	0.11	9.8	10	2.8	4.4	0.11	0.65
8/29/2022	LCPR	GL	0.06	0.53	0.16	12.6	6	1.2	3.8	0.02	0.55
9/6/2022	LCPR	GL	0.10	0.84	0.15	9.9	14	1.0	4.0	0.04	0.88
9/12/2022	LCPR	GL	0.05	0.52	0.14	9.1	5	4.5	3.5	0.14	0.66
9/19/2022	LCPR	GL	0.05	0.42	0.06	6.8	8	5.4	4.0	0.05	0.47
9/26/2022	LCPR	GL	0.05	0.49	0.07	11.7	8	3.4	4.9	<0.02	NR
10/3/2022	LCPR	GL	0.03	1.20	0.70	12.7	11	1.6	5.5	<0.02	NR

Laboratory Data
Analyzed by
Ouachita Baptist University Water Lab

Water Quality Monitoring
Lake Conway Point Removed
HUC 11110203 PJT# 19-900
Equilibrium, 5019441765

Station ID LCC
Stream Name Hackers Creek
Site Location POPE COUNTY, AT GRIFFEN FLAT RD BRIDGE CROSSING
8 digit HUC 11110203
Lat 35°19'48.34"N
Long 92°52'9.55"W

Minimum Detection and Minimum Reporting Limits

Parameter	TP	TKN	NH3-N	Turbidity	TSS	Sulfate	Chloride	NO_3+NO_2-N
Units	mg/L	mg/L	mg/L	NTU	mg/L	mg/L	mg/L	mg/L
MDL	0.01	0.03	0.01	0.02	0.5	0.15	0.08	0.01
MRL	0.02	0.05	0.02	0.1	1	0.5	0.5	0.02

*NR = not reportable due to either NO3+NO2-N or TKN resulting in less than MRL

Sample Date	Watershed	Site	TP (mg/L)	TKN (mg/L)	Ammonia-N (mg/L)	Turbidity (NTU)	TSS (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	NO3+NO2-N (mg/L)	TN (mg/L)
10/15/2019	LCPR	LCC	0.04	0.50	0.05	6.1	3	3.5	3.0	0.46	0.96
10/22/2019	LCPR	LCC	0.04	0.49	0.06	8.7	6	4.0	2.9	0.51	1.00
10/29/2019	LCPR	LCC	0.03	0.36	0.04	6.0	1	4.1	3.0	0.52	0.88
11/5/2019	LCPR	LCC	0.04	0.35	0.05	6.6	2	4.2	3.0	0.69	1.04
11/12/2019	LCPR	LCC	0.08	0.52	0.04	12.7	5	4.1	2.8	0.91	1.43
11/19/2019	LCPR	LCC	0.04	0.27	0.02	7.2	5	4.3	2.8	0.91	1.18
11/24/2019	LCPR	LCC	0.09	0.55	0.04	15.0	8	4.1	2.6	0.85	1.40
12/3/2019	LCPR	LCC	0.07	0.40	0.02	11.5	3	3.7	2.3	0.96	1.36
12/10/2019	LCPR	LCC	0.05	0.30	0.03	9.6	3	3.9	2.4	0.94	1.24
12/17/2019	LCPR	LCC	0.03	0.35	0.04	8.7	3	4.5	2.8	0.91	1.26
12/31/2019	LCPR	LCC	0.04	0.39	<0.02	9.0	4	4.7	2.9	0.70	1.09
1/6/2020	LCPR	LCC	0.02	0.25	<0.02	7.1	1	5.5	2.9	0.75	1.00
1/14/2020	LCPR	LCC	0.14	0.78	0.04	37.1	18	3.1	1.8	0.69	1.47
1/21/2020	LCPR	LCC	0.07	0.49	0.05	13.3	6	3.9	2.4	0.95	1.44
1/28/2020	LCPR	LCC	0.04	0.30	0.03	11.9	4	4.2	2.7	0.93	1.23
2/4/2020	LCPR	LCC	0.04	0.30	0.03	8.9	5	4.4	2.8	0.93	1.23
2/11/2020	LCPR	LCC	0.04	0.37	0.02	11.1	6	5.6	3.0	0.86	1.23
2/18/2020	LCPR	LCC	0.07	0.57	0.03	19.7	14	4.1	2.4	0.81	1.38
2/25/2020	LCPR	LCC	0.04	0.37	<0.02	10.1	5	4.1	2.6	0.74	1.11
3/3/2020	LCPR	LCC	0.02	0.35	<0.02	6.8	3	4.1	2.7	0.72	1.07
3/10/2020	LCPR	LCC	0.03	0.29	0.02	6.7	3	4.4	2.9	0.72	1.01
3/17/2020	LCPR	LCC	0.06	0.41	0.02	15.3	9	3.8	2.3	0.68	1.09
3/24/2020	LCPR	LCC	0.18	0.93	0.11	37.6	40	3.2	1.8	0.52	1.45
3/31/2020	LCPR	LCC	0.13	0.63	0.04	32.1	27	2.7	1.6	0.37	1.00
4/7/2020	LCPR	LCC	0.06	0.41	0.02	7.4	7	3.6	2.1	0.51	0.92
4/13/2020	LCPR	LCC	0.09	0.64	0.04	22.4	19	NR	NR	NR	NR
4/21/2020	LCPR	LCC	0.04	0.42	0.02	8.4	5	3.9	2.1	0.44	0.86
4/28/2020	LCPR	LCC	0.05	0.48	0.03	10.5	6	4.1	2.4	0.47	0.95
5/5/2020	LCPR	LCC	0.06	0.45	0.05	8.6	6	4.0	2.3	0.53	0.98
5/12/2020	LCPR	LCC	0.05	0.48	0.05	8.3	8	3.9	2.4	0.43	0.91
5/19/2020	LCPR	LCC	0.08	0.51	0.04	15.7	15	3.6	2.1	0.42	0.93
5/26/2020	LCPR	LCC	0.29	1.07	0.05	32.9	43	2.9	2.2	0.35	1.42
6/2/2020	LCPR	LCC	0.06	0.43	0.03	7.7	5	3.6	2.5	0.42	0.85
6/9/2020	LCPR	LCC	0.10	0.58	0.05	11.8	13	3.9	2.5	0.50	1.08
6/16/2020	LCPR	LCC	0.06	0.50	0.05	5.6	4	4.5	2.9	0.41	0.91
6/23/2020	LCPR	LCC	0.06	0.53	0.04	8.2	8	3.9	3.0	0.45	0.98
6/30/2020	LCPR	LCC	0.05	0.44	0.06	4.4	6	3.8	3.3	0.32	0.76
7/6/2020	LCPR	LCC	0.16	0.78	0.05	6.1	9	2.9	3.4	0.58	1.36
7/13/2020	LCPR	LCC	0.08	0.69	0.08	11.7	11	3.2	3.6	0.33	1.02
7/20/2020	LCPR	LCC	0.05	0.53	0.05	3.6	4	3.3	3.7	0.19	0.72
7/27/2020	LCPR	LCC	0.05	0.46	0.05	4.4	6	3.3	4.2	0.18	0.64
8/3/2020	LCPR	LCC	0.05	0.49	0.04	5.7	6	3.2	3.7	0.23	0.72
8/10/2020	LCPR	LCC	0.06	0.56	0.05	5.4	6	3.2	3.8	0.21	0.77
8/17/2020	LCPR	LCC	0.05	0.43	0.04	3.7	5	3.6	3.7	0.17	0.60
8/24/2020	LCPR	LCC	0.06	0.41	0.02	5.5	9	3.3	4.0	0.11	0.52
8/31/2020	LCPR	LCC	0.07	0.55	0.07	4.8	12	2.7	3.3	0.24	0.79
9/6/2020	LCPR	LCC	0.18	0.75	0.04	18.2	16	3.1	2.0	0.57	1.32
9/14/2020	LCPR	LCC	0.08	0.48	0.02	3.7	2	3.3	2.7	0.54	1.02
9/21/2020	LCPR	LCC	0.05	0.46	0.02	6.3	5	5.5	3.0	0.46	0.92
9/28/2020	LCPR	LCC	0.04	0.60	<0.02	3.3	4	3.7	2.9	0.44	1.04
10/5/2020	LCPR	LCC	0.04	0.36	0.02	4.0	5	3.9	3.4	0.42	0.78

Laboratory Data
Analyzed by
Ouachita Baptist University Water Lab

Water Quality Monitoring
Lake Conway Point Removed
HUC 11110203 PJT# 19-900
Equilibrium, 5019441765

Sample Date	Watershed	Site	TP (mg/L)	TKN (mg/L)	Ammonia-N (mg/L)	Turbidity (NTU)	TSS (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	NO3+NO2-N (mg/L)	TN (mg/L)
10/12/2020	LCPR	LCC	0.04	0.40	0.02	3.0	3	3.5	3.9	0.29	0.69
10/19/2020	LCPR	LCC	0.03	0.40	0.03	3.1	3	4.5	3.8	0.27	0.67
10/26/2020	LCPR	LCC	0.03	0.31	0.03	2.5	2	4.1	4.2	0.08	0.39
11/2/2020	LCPR	LCC	0.05	0.48	0.04	6.8	4	3.8	3.2	0.65	1.13
11/10/2020	LCPR	LCC	0.03	0.38	<0.02	3.4	4	4.2	3.5	0.43	0.81
11/17/2020	LCPR	LCC	0.03	0.26	<0.02	1.7	4	4.2	3.7	0.21	0.47
11/21/2020	LCPR	LCC	0.02	0.28	<0.02	2.0	4	4.3	3.9	0.22	0.50
12/1/2020	LCPR	LCC	0.03	0.37	0.02	6.1	3	4.4	3.6	0.61	0.98
12/8/2020	LCPR	LCC	0.03	0.38	0.02	4.4	4	4.6	3.8	0.59	0.97
12/15/2020	LCPR	LCC	0.05	0.41	0.04	14.0	7	4.8	3.8	0.67	1.08
12/21/2020	LCPR	LCC	0.03	0.27	<0.02	7.5	3	4.7	3.6	0.73	1.00
12/28/2020	LCPR	LCC	0.02	0.26	<0.02	5.9	3	5.0	3.7	0.70	0.96
1/5/2021	LCPR	LCC	0.09	0.44	0.03	17.7	7	4.4	3.1	0.95	1.39
1/12/2021	LCPR	LCC	0.07	0.46	0.09	14.0	4	4.0	2.9	0.87	1.33
1/19/2021	LCPR	LCC	0.04	0.22	0.02	8.6	2	4.6	3.1	0.88	1.10
1/26/2021	LCPR	LCC	0.11	0.65	0.03	27.7	15	4.0	2.6	0.61	1.26
2/2/2021	LCPR	LCC	0.04	0.29	0.02	10.8	4	4.4	2.8	0.75	1.04
2/9/2021	LCPR	LCC	0.03	0.21	<0.02	7.8	5	4.6	3.0	0.69	0.90
2/23/2021	LCPR	LCC	0.04	0.36	<0.02	9.4	3	5.1	3.4	0.65	1.01
3/2/2021	LCPR	LCC	0.06	0.46	0.02	17.3	9	4.4	2.8	0.63	1.09
3/8/2021	LCPR	LCC	0.03	0.29	<0.02	8.9	4	4.8	3.2	0.63	0.92
3/16/2021	LCPR	LCC	0.06	0.48	<0.02	15.7	15	4.5	3.0	0.49	0.97
3/23/2021	LCPR	LCC	0.10	0.70	0.02	38.9	46	3.8	2.5	0.46	1.16
3/30/2021	LCPR	LCC	0.05	0.60	0.03	10.7	9	4.0	2.8	0.53	1.13
4/6/2021	LCPR	LCC	0.04	0.41	0.02	7.5	6	4.0	2.8	0.47	0.88
4/13/2021	LCPR	LCC	0.05	0.50	0.08	12.2	7	4.0	2.9	0.40	0.90
4/20/2021	LCPR	LCC	0.05	0.39	0.02	8.6	5	4.0	2.8	0.37	0.76
4/27/2021	LCPR	LCC	0.06	0.41	<0.02	15.0	8	4.0	2.7	0.34	0.75
5/4/2021	LCPR	LCC	0.20	0.96	0.05	42.9	45	3.1	1.9	0.31	1.27
5/11/2021	LCPR	LCC	0.08	0.42	<0.02	14.0	8	3.5	2.4	0.46	0.88
5/18/2021	LCPR	LCC	0.12	0.66	0.04	14.7	20	3.4	2.5	0.38	1.04
5/25/2021	LCPR	LCC	0.12	0.58	0.05	21.5	17	3.3	1.6	0.32	0.90
6/1/2021	LCPR	LCC	0.12	0.69	0.07	23.5	34	2.9	1.8	0.29	0.98
6/8/2021	LCPR	LCC	0.10	0.59	0.06	11.2	14	3.2	2.0	0.32	0.91
6/15/2021	LCPR	LCC	0.07	0.50	0.06	9.4	10	3.7	2.3	0.48	0.98
6/22/2021	LCPR	LCC	0.06	0.49	0.06	6.1	8	3.8	2.5	0.50	0.99
6/29/2021	LCPR	LCC	0.06	0.49	0.04	6.3	8	4.1	3.4	0.43	0.92
7/6/2021	LCPR	LCC	0.05	0.37	0.03	5.3	7	4.4	2.8	0.39	0.76
7/13/2021	LCPR	LCC	0.06	0.62	0.05	5.1	7	3.7	3.0	0.37	0.99
7/20/2021	LCPR	LCC	0.08	0.46	0.03	6.2	7	3.9	2.6	0.43	0.89
7/27/2021	LCPR	LCC	0.05	0.43	0.04	4.0	4	5.1	3.1	0.18	0.61
8/3/2021	LCPR	LCC	0.05	0.38	0.05	4.4	4	3.7	3.3	0.12	0.50
8/10/2021	LCPR	LCC	0.05	0.45	0.03	4.5	8	3.4	3.7	0.07	0.52
8/17/2021	LCPR	LCC	0.05	0.41	0.03	4.0	4	3.1	4.1	0.06	0.47
8/24/2021	LCPR	LCC	0.05	0.48	0.05	4.7	5	2.9	4.2	0.07	0.55
8/31/2021	LCPR	LCC	0.05	0.43	0.03	3.9	5	2.7	4.3	0.04	0.47
9/7/2021	LCPR	LCC	0.04	0.49	0.03	3.2	4	2.4	4.6	0.04	0.53
9/14/2021	LCPR	LCC	0.04	0.61	0.02	2.6	3	2.4	4.8	0.02	0.63
9/21/2021	LCPR	LCC	0.05	0.45	0.04	5.7	6	2.3	4.8	0.04	0.49
9/28/2021	LCPR	LCC	0.04	0.48	0.05	3.6	4	2.4	5.9	0.08	0.56
10/5/2021	LCPR	LCC	0.04	0.53	0.04	3.9	3	2.3	4.6	0.05	0.58

Laboratory Data
Analyzed by
Ouachita Baptist University Water Lab

Water Quality Monitoring
Lake Conway Point Removed
HUC 11110203 PJT# 19-900
Equilibrium, 5019441765

Sample Date	Watershed	Site	TP (mg/L)	TKN (mg/L)	Ammonia-N (mg/L)	Turbidity (NTU)	TSS (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	NO3+NO2-N (mg/L)	TN (mg/L)
10/12/2021	LCPR	LCC	0.05	0.54	0.03	4.3	4	2.3	4.7	0.06	0.60
10/19/2021	LCPR	LCC	0.03	0.45	0.04	3.3	2	2.3	5.4	0.06	0.51
10/26/2021	LCPR	LCC	0.04	0.49	0.02	3.8	4	2.4	4.4	0.04	0.53
11/2/2021	LCPR	LCC	0.03	0.45	<0.02	3.5	3	3.2	4.1	0.03	0.48
11/9/2021	LCPR	LCC	0.04	0.34	<0.02	4.9	3	3.4	4.1	0.02	0.36
11/16/2021	LCPR	LCC	0.04	0.54	<0.02	3.0	4	3.4	4.0	<0.02	NR
11/22/2021	LCPR	LCC	0.04	0.40	<0.02	2.7	6	3.4	3.9	0.04	0.44
11/30/2021	LCPR	LCC	0.03	0.29	<0.02	2.6	3	3.5	4.3	<0.02	NR
12/7/2021	LCPR	LCC	0.04	0.35	<0.02	3.4	4	3.4	4.3	<0.02	NR
12/14/2021	LCPR	LCC	0.02	0.26	<0.02	2.5	2	3.7	4.3	<0.02	NR
12/19/2021	LCPR	LCC	0.19	1.03	0.16	21.1	12	5.9	3.3	0.63	1.66
12/26/2021	LCPR	LCC	0.04	0.47	0.04	5.6	5	4.3	3.8	1.15	1.62
1/4/2022	LCPR	LCC	0.18	0.84	0.09	20.5	15	4.6	2.9	1.31	2.15
1/11/2022	LCPR	LCC	0.10	0.40	0.04	12.2	5	4.5	3.0	1.38	1.78
1/18/2022	LCPR	LCC	0.06	0.38	0.02	10.0	7	4.3	3.2	1.24	1.62
1/25/2022	LCPR	LCC	0.04	0.32	<0.02	7.1	3	5.1	3.4	1.19	1.51
2/1/2022	LCPR	LCC	0.03	0.29	<0.02	5.8	3	4.9	3.4	1.02	1.31
2/8/2022	LCPR	LCC	0.04	0.27	<0.02	6.3	4	5.5	3.7	1.00	1.27
2/15/2022	LCPR	LCC	0.03	0.30	0.02	4.7	4	4.8	3.6	0.86	1.16
2/21/2022	LCPR	LCC	0.04	0.37	0.04	6.8	5	5.2	4.0	0.72	1.09
2/28/2022	LCPR	LCC	0.07	0.41	<0.02	11.0	7	3.7	2.5	0.81	1.22
3/7/2022	LCPR	LCC	0.19	1.02	0.03	32.9	40	4.1	2.8	0.61	1.63
3/14/2022	LCPR	LCC	0.03	0.35	<0.02	5.4	4	4.2	2.8	0.61	0.96
3/21/2022	LCPR	LCC	0.03	0.29	<0.02	4.4	4	4.0	2.9	0.46	0.75
3/28/2022	LCPR	LCC	0.05	0.44	<0.02	6.8	6	3.8	2.5	0.55	0.99
4/4/2022	LCPR	LCC	0.04	0.37	<0.02	6.0	7	4.3	2.7	0.41	0.78
4/11/2022	LCPR	LCC	0.03	0.31	<0.02	5.1	6	4.1	2.9	0.39	0.70
4/18/2022	LCPR	LCC	0.04	0.42	0.03	6.7	7	3.7	2.5	0.43	0.85
4/25/2022	LCPR	LCC	0.16	0.67	0.02	22.5	36	2.8	1.8	0.28	0.95
5/2/2022	LCPR	LCC	0.09	0.60	0.06	13.3	22	3.4	2.2	0.43	1.03
5/9/2022	LCPR	LCC	0.06	0.38	0.02	9.9	10	3.2	2.0	0.39	0.77
5/16/2022	LCPR	LCC	0.17	0.78	0.08	13.6	23	3.5	2.4	0.37	1.15
5/23/2022	LCPR	LCC	0.07	0.42	0.05	6.1	7	3.8	2.4	0.48	0.9
5/31/2022	LCPR	LCC	0.06	0.33	0.04	5.6	6	3.7	2.6	0.35	0.68
6/6/2022	LCPR	LCC	0.06	0.37	0.04	6.1	6	3.8	2.7	0.45	0.82
6/13/2022	LCPR	LCC	0.08	0.53	0.05	7.0	9	3.5	2.9	0.38	0.91
6/20/2022	LCPR	LCC	0.07	0.40	0.04	5.3	5	3.7	3.0	0.32	0.72
6/27/2022	LCPR	LCC	0.06	0.48	0.04	5.4	6	3.2	3.5	0.22	0.7
7/5/2022	LCPR	LCC	0.06	0.47	0.04	5.2	7	3.4	4.2	0.11	0.58
7/11/2022	LCPR	LCC	0.06	0.64	0.09	4.3	7	2.7	4.2	0.10	0.74
7/18/2022	LCPR	LCC	0.05	0.47	0.03	15.0	5	2.7	4.2	0.05	0.52
7/25/2022	LCPR	LCC	0.07	0.49	0.04	4.5	7	2.0	4.9	0.08	0.57
8/1/2022	LCPR	LCC	0.06	0.57	0.07	4.9	5	2.1	4.0	0.12	0.69
8/8/2022	LCPR	LCC	0.06	0.55	0.02	5.3	7	2.3	4.4	0.04	0.59
8/15/2022	LCPR	LCC	0.05	0.41	0.06	4.2	6	2.7	4.7	0.17	0.58
8/22/2022	LCPR	LCC	0.06	0.58	0.08	4.6	8	2.4	4.1	0.12	0.70
8/29/2022	LCPR	LCC	0.05	0.44	0.05	8.5	23	1.1	4.7	0.02	0.46
9/6/2022	LCPR	LCC	0.06	0.49	0.09	3.3	5	2.3	4.7	0.14	0.63
9/12/2022	LCPR	LCC	0.05	0.41	0.05	4.1	6	2.0	3.7	0.09	0.50
9/19/2022	LCPR	LCC	0.05	0.48	0.05	3.0	5	2.1	4.0	0.04	0.52
9/26/2022	LCPR	LCC	0.04	0.39	0.03	2.6	2	2.0	4.4	0.15	0.54
10/3/2022	LCPR	LCC	0.03	0.46	0.03	2.5	3	1.8	4.9	0.05	0.51

Laboratory Data
Analyzed by
Ouachita Baptist University Water Lab

Water Quality Monitoring
Lake Conway Point Removed
HUC 11110203 PJT# 19-900
Equilibrium, 5019441765

Station ID PR
Stream Name POINT REMOVE CREEK
Site Location CONWAY COUNTY, HWY 64 BRIDGE CROSSING
8 digit HUC 11110203
Lat 35°10'56.43"N
Long 92°47'2.77"W

Minimum Detection and Minimum Reporting Limits

Parameter	TP	TKN	NH3-N	Turbidity	TSS	Sulfate	Chloride	NO_3+NO_2-N
Units	mg/L	mg/L	mg/L	NTU	mg/L	mg/L	mg/L	mg/L
MDL	0.01	0.03	0.01	0.02	0.5	0.15	0.08	0.01
MRL	0.02	0.05	0.02	0.1	1	0.5	0.5	0.02

*NR = not reportable due to either NO3+NO2-N or TKN resulting in less than MRL

Sample Date	Watershed	Site	TP (mg/L)	TKN (mg/L)	Ammonia-N (mg/L)	Turbidity (NTU)	TSS (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	NO3+NO2-N (mg/L)	TN (mg/L)
10/15/2019	LCPR	PR	0.07	0.56	0.05	20.0	19	4.6	3.3	0.29	0.85
10/22/2019	LCPR	PR	0.09	0.56	0.09	29.4	34	5.4	4.8	0.39	0.95
10/29/2019	LCPR	PR	0.07	0.53	0.07	19.3	19	5.3	4.1	0.40	0.93
11/5/2019	LCPR	PR	0.06	0.47	0.05	9.4	10	5.3	4.2	0.47	0.94
11/12/2019	LCPR	PR	0.09	0.52	0.04	18.3	10	4.9	3.2	0.53	1.05
11/19/2019	LCPR	PR	0.05	0.57	0.04	11.4	6	5.1	3.3	0.61	1.18
11/24/2019	LCPR	PR	0.12	0.57	<0.02	19.6	11	4.6	3.2	0.48	1.05
12/3/2019	LCPR	PR	0.11	0.56	0.03	17.4	7	4.3	3.0	0.45	1.01
12/10/2019	LCPR	PR	0.09	0.47	0.05	12.3	6	4.7	3.0	0.50	0.97
12/17/2019	LCPR	PR	0.05	0.37	0.07	10.6	4	4.7	3.2	0.53	0.90
12/31/2019	LCPR	PR	0.09	0.54	0.04	19.4	10	5.7	4.1	0.45	0.99
1/6/2020	LCPR	PR	0.05	0.49	0.02	12.8	3	9.5	4.3	0.53	1.02
1/14/2020	LCPR	PR	0.14	0.90	0.04	42.7	12	3.4	2.7	0.38	1.28
1/21/2020	LCPR	PR	0.08	0.48	0.04	17.8	6	3.8	2.4	0.47	0.95
1/28/2020	LCPR	PR	0.06	0.48	0.02	17.0	8	4.4	3.1	0.51	0.99
2/4/2020	LCPR	PR	0.05	0.40	0.03	14.7	10	4.7	3.2	0.57	0.97
2/11/2020	LCPR	PR	0.07	0.61	0.03	19.0	12	4.6	3.6	0.50	1.11
2/18/2020	LCPR	PR	0.06	0.51	0.03	18.5	9	4.3	2.8	0.49	1.00
2/25/2020	LCPR	PR	0.06	0.42	0.03	17.1	12	4.8	3.2	0.55	0.97
3/3/2020	LCPR	PR	0.05	0.47	0.03	16.2	15	5.2	3.8	0.47	0.94
3/10/2020	LCPR	PR	0.06	0.44	0.06	15.5	18	5.2	4.4	0.38	0.82
3/17/2020	LCPR	PR	0.10	0.63	0.05	29.7	11	3.8	2.9	0.37	1.00
3/24/2020	LCPR	PR	0.07	0.50	0.04	21.6	8	3.6	2.2	0.34	0.84
3/31/2020	LCPR	PR	0.09	0.66	0.05	22.8	22	3.2	2.1	0.23	0.89
4/7/2020	LCPR	PR	0.08	0.58	0.03	10.4	12	3.6	2.2	0.25	0.83
4/13/2020	LCPR	PR	0.14	0.88	0.07	28.5	25	NR	NR	NR	NR
4/21/2020	LCPR	PR	0.11	0.89	0.06	15.7	28	4.2	3.0	0.26	1.15
4/28/2020	LCPR	PR	0.09	0.62	0.06	19.3	22	4.0	3.1	0.32	0.94
5/5/2020	LCPR	PR	0.11	0.73	0.10	17.2	26	3.6	3.0	0.25	0.98
5/12/2020	LCPR	PR	0.11	0.66	0.08	26.9	34	4.3	3.4	0.33	0.99
5/19/2020	LCPR	PR	0.14	0.97	0.09	23.1	22	3.3	2.1	0.24	1.21
5/26/2020	LCPR	PR	0.10	0.79	0.09	17.4	19	3.2	2.6	0.24	1.03
6/2/2020	LCPR	PR	0.10	0.67	0.09	20.6	25	3.1	3.0	0.21	0.88
6/9/2020	LCPR	PR	0.14	0.88	0.14	31.1	41	4.6	3.4	0.27	1.15
6/16/2020	LCPR	PR	0.10	0.59	0.09	21.6	38	3.8	3.7	0.28	0.87
6/23/2020	LCPR	PR	0.10	0.98	0.08	26.2	35	3.9	4.0	0.23	1.21
6/30/2020	LCPR	PR	0.09	0.64	0.09	20.0	31	4.5	6.3	0.23	0.87
7/6/2020	LCPR	PR	0.11	1.09	0.09	21.0	35	3.8	3.7	0.23	1.32
7/13/2020	LCPR	PR	0.10	0.93	0.05	18.7	35	3.5	4.7	0.16	1.09
7/20/2020	LCPR	PR	0.08	0.64	0.06	18.1	28	3.8	6.3	0.08	0.72
7/27/2020	LCPR	PR	0.10	0.74	0.07	18.8	25	4.7	10.8	0.16	0.90
8/3/2020	LCPR	PR	0.11	0.89	0.08	24.9	40	5.7	16.1	0.15	1.04
8/10/2020	LCPR	PR	0.10	0.77	0.04	30.4	18	4.9	12.6	0.13	0.90
8/17/2020	LCPR	PR	0.12	0.78	0.11	30.7	46	5.1	5.4	0.25	1.03
8/24/2020	LCPR	PR	0.11	0.76	0.05	33.2	41	4.8	10.6	0.14	0.90
8/31/2020	LCPR	PR	0.15	1.08	0.22	35.8	58	6.2	4.7	0.32	1.40
9/6/2020	LCPR	PR	0.13	0.76	0.06	15.8	23	4.3	2.3	0.38	1.14
9/14/2020	LCPR	PR	0.12	0.68	0.08	16.6	33	4.8	3.9	0.32	1.00
9/21/2020	LCPR	PR	0.12	0.65	0.05	32.6	36	13.7	5.0	0.29	0.94
9/28/2020	LCPR	PR	0.09	0.52	0.04	26.9	38	5.3	4.7	0.25	0.77
10/5/2020	LCPR	PR	0.08	0.47	0.03	23.0	25	5.2	5.7	0.27	0.74

Laboratory Data
Analyzed by
Ouachita Baptist University Water Lab

Water Quality Monitoring
Lake Conway Point Removed
HUC 11110203 PJT# 19-900
Equilibrium, 5019441765

Sample Date	Watershed	Site	TP (mg/L)	TKN (mg/L)	Ammonia-N (mg/L)	Turbidity (NTU)	TSS (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	NO3+NO2-N (mg/L)	TN (mg/L)
10/12/2020	LCPR	PR	0.09	0.58	0.03	30.3	33	5.6	7.6	0.21	0.79
10/19/2020	LCPR	PR	0.06	0.41	0.03	18.3	18	6.0	9.7	0.13	0.54
10/26/2020	LCPR	PR	0.05	0.43	0.03	13.6	13	8.6	12.8	0.06	0.49
11/2/2020	LCPR	PR	0.26	0.54	0.06	20.1	18	4.9	4.2	0.32	0.86
11/10/2020	LCPR	PR	0.07	0.54	<0.02	25.3	35	5.5	6.0	0.28	0.82
11/17/2020	LCPR	PR	0.07	0.51	<0.02	9.9	13	5.8	7.3	0.03	0.54
11/21/2020	LCPR	PR	0.08	0.54	<0.02	10.5	19	5.5	8.2	0.02	0.56
12/1/2020	LCPR	PR	0.06	0.46	<0.02	10.0	7	4.4	3.8	0.35	0.81
12/8/2020	LCPR	PR	0.05	0.37	0.02	10.6	8	5.1	4.6	0.36	0.73
12/15/2020	LCPR	PR	0.11	0.60	0.03	33.5	20	6.8	5.0	0.44	1.04
12/21/2020	LCPR	PR	0.05	0.40	0.02	11.5	7	5.4	4.1	0.50	0.90
12/28/2020	LCPR	PR	0.05	0.34	0.02	8.8	3	5.5	4.8	0.45	0.79
1/5/2021	LCPR	PR	0.09	0.53	0.02	22.8	9	5.1	3.8	0.51	1.04
1/12/2021	LCPR	PR	0.06	0.58	0.10	15.3	3	5.2	3.7	0.56	1.14
1/19/2021	LCPR	PR	0.05	0.33	0.02	11.1	4	5.4	4.0	0.58	0.91
1/26/2021	LCPR	PR	0.17	0.92	0.05	135.0	33	6.8	5.2	0.45	1.37
2/2/2021	LCPR	PR	0.06	0.37	<0.02	16.0	5	4.7	3.3	0.46	0.83
2/9/2021	LCPR	PR	0.10	0.53	0.02	20.5	7	5.5	10.0	0.27	0.80
2/23/2021	LCPR	PR	0.08	0.61	0.07	32.2	19	8.0	12.0	0.40	1.01
3/2/2021	LCPR	PR	0.15	0.82	0.03	56.0	25	4.3	3.5	0.33	1.15
3/8/2021	LCPR	PR	0.08	0.74	<0.02	30.8	14	5.0	4.5	0.39	1.13
3/16/2021	LCPR	PR	0.12	0.85	0.05	31.2	33	5.2	4.6	0.41	1.26
3/23/2021	LCPR	PR	0.10	0.67	0.05	31.6	27	5.6	4.0	0.23	0.90
3/30/2021	LCPR	PR	0.08	0.70	0.04	22.1	17	5.3	3.8	0.24	0.94
4/6/2021	LCPR	PR	0.08	0.63	0.05	25.0	25	4.7	4.2	0.25	0.88
4/13/2021	LCPR	PR	0.08	0.67	0.12	24.8	29	4.9	4.5	0.28	0.95
4/20/2021	LCPR	PR	0.08	0.57	0.05	24.4	25	5.3	5.5	0.26	0.83
4/27/2021	LCPR	PR	0.08	0.56	0.04	27.1	26	4.7	4.3	0.26	0.82
5/4/2021	LCPR	PR	0.12	0.77	0.06	32.3	22	3.8	2.9	0.22	0.99
5/11/2021	LCPR	PR	0.11	0.62	0.06	16.9	19	3.3	2.6	0.19	0.81
5/18/2021	LCPR	PR	0.21	0.98	0.09	51.7	55	3.6	3.9	0.20	1.18
5/25/2021	LCPR	PR	0.11	0.62	0.05	20.1	10	2.7	1.8	0.16	0.78
6/1/2021	LCPR	PR	0.11	0.59	0.04	15.8	13	2.7	1.7	0.13	0.72
6/8/2021	LCPR	PR	0.11	0.56	0.07	11.0	11	2.8	2.0	0.16	0.72
6/15/2021	LCPR	PR	0.15	0.69	0.11	12.4	18	2.7	2.2	0.15	0.84
6/22/2021	LCPR	PR	0.15	0.85	0.18	46.0	53	3.9	4.7	0.25	1.10
6/29/2021	LCPR	PR	0.13	0.75	0.12	46.6	54	4.2	5.0	0.29	1.04
7/6/2021	LCPR	PR	0.10	0.60	0.05	23.1	23	4.8	6.2	0.29	0.89
7/13/2021	LCPR	PR	0.11	0.67	0.08	35.9	50	3.8	6.5	0.21	0.88
7/20/2021	LCPR	PR	0.11	0.68	0.13	44.3	49	3.1	3.9	0.20	0.88
7/27/2021	LCPR	PR	0.09	0.53	0.07	28.8	32	3.1	4.2	0.12	0.65
8/3/2021	LCPR	PR	0.09	0.50	0.05	26.7	30	4.6	10.4	0.11	0.61
8/10/2021	LCPR	PR	0.09	0.55	0.04	43.8	52	5.2	10.7	0.15	0.70
8/17/2021	LCPR	PR	0.08	0.70	0.11	20.6	23	6.5	7.4	0.17	0.87
8/24/2021	LCPR	PR	0.08	0.75	0.05	25.8	27	6.4	9.5	0.19	0.94
8/31/2021	LCPR	PR	0.08	0.71	0.02	36.8	42	5.2	12.6	<0.02	NR
9/7/2021	LCPR	PR	0.10	1.07	0.11	28.5	34	4.6	14.2	0.08	1.15
9/14/2021	LCPR	PR	0.08	0.72	<0.02	25.7	28	5.4	20.9	<0.02	NR
9/21/2021	LCPR	PR	0.09	0.85	0.02	32.9	32	6.4	31.9	0.12	0.97
9/28/2021	LCPR	PR	0.08	0.78	0.09	40.3	44	7.6	18.2	0.20	0.98
10/5/2021	LCPR	PR	0.10	0.96	0.09	38.2	31	12.8	16.4	0.17	1.13

Laboratory Data
Analyzed by
Ouachita Baptist University Water Lab

Water Quality Monitoring
Lake Conway Point Removed
HUC 11110203 PJT# 19-900
Equilibrium, 5019441765

Sample Date	Watershed	Site	TP (mg/L)	TKN (mg/L)	Ammonia-N (mg/L)	Turbidity (NTU)	TSS (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	NO3+NO2-N (mg/L)	TN (mg/L)
10/12/2021	LCPR	PR	0.08	0.77	0.10	47.5	34	8.6	14.3	0.28	1.05
10/19/2021	LCPR	PR	0.07	0.61	0.05	21.7	15	9.7	12.4	0.17	0.78
10/26/2021	LCPR	PR	0.08	0.66	0.04	41.4	38	8.5	14.4	0.17	0.83
11/2/2021	LCPR	PR	0.09	1.02	0.31	47.3	27	8.2	5.9	0.55	1.57
11/9/2021	LCPR	PR	0.06	0.69	0.11	11.1	11	8.8	27.4	0.33	1.02
11/16/2021	LCPR	PR	0.10	1.09	0.42	22.1	11	9.9	10.2	0.49	1.58
11/22/2021	LCPR	PR	0.08	0.75	0.05	12.3	16	10.2	14.3	0.39	1.14
11/30/2021	LCPR	PR	0.12	1.21	<0.02	8.7	9	10.1	22.4	0.05	1.26
12/7/2021	LCPR	PR	0.11	1.29	0.53	19.4	18	11.3	37.9	0.14	1.43
12/14/2021	LCPR	PR	0.12	0.90	0.33	9.8	9	12.4	36.1	0.19	1.09
12/19/2021	LCPR	PR	0.12	0.74	0.07	54.9	15	4.4	5.2	0.19	0.93
12/26/2021	LCPR	PR	0.08	0.74	0.07	31.6	41	5.0	4.2	0.58	1.32
1/4/2022	LCPR	PR	0.15	0.79	0.03	34.0	19	4.6	2.8	0.68	1.47
1/11/2022	LCPR	PR	0.09	0.60	0.03	18.0	8	4.9	3.1	0.80	1.40
1/18/2022	LCPR	PR	0.06	0.52	0.02	14.5	7	5.3	3.4	0.76	1.28
1/25/2022	LCPR	PR	0.05	0.47	0.02	10.2	5	5.6	3.7	0.71	1.18
2/1/2022	LCPR	PR	0.04	0.45	0.03	12.7	8	5.9	4.3	0.62	1.07
2/8/2022	LCPR	PR	0.10	0.57	0.02	15.5	9	6.0	7.2	0.41	0.98
2/15/2022	LCPR	PR	0.03	0.40	<0.02	9.0	4	5.4	4.5	0.46	0.86
2/21/2022	LCPR	PR	0.05	0.45	0.03	15.3	9	5.2	4.2	0.42	0.87
2/28/2022	LCPR	PR	0.08	0.54	<0.02	19.3	9	4.9	3.6	0.53	1.07
3/7/2022	LCPR	PR	0.06	0.50	0.03	17.2	12	5.1	3.8	0.36	0.86
3/14/2022	LCPR	PR	0.04	0.35	<0.02	12.2	9	4.8	3.5	0.34	0.69
3/21/2022	LCPR	PR	0.06	0.48	0.02	16.8	25	5.4	4.7	0.24	0.72
3/28/2022	LCPR	PR	0.07	0.59	<0.02	16.4	8	3.7	2.5	0.24	0.83
4/4/2022	LCPR	PR	0.08	0.56	0.02	14.0	24	4.1	3.2	0.21	0.77
4/11/2022	LCPR	PR	0.08	0.52	0.03	16.7	10	4.3	4.4	0.18	0.70
4/18/2022	LCPR	PR	0.09	0.54	0.04	17.5	20	4.1	3.4	0.23	0.77
4/25/2022	LCPR	PR	0.08	0.52	0.02	15.3	16	3.5	2.3	0.24	0.76
5/2/2022	LCPR	PR	0.09	0.63	0.06	15.0	28	3.4	2.6	0.15	0.78
5/9/2022	LCPR	PR	0.09	0.45	0.04	12.6	9	3.0	1.9	0.18	0.63
5/16/2022	LCPR	PR	0.13	0.68	0.11	12.5	26	3.0	2.3	0.13	0.81
5/23/2022	LCPR	PR	0.14	0.74	0.16	25.1	40	4.2	4.3	0.29	1.03
5/31/2022	LCPR	PR	0.12	0.70	0.06	28.5	43	4.2	4.0	0.22	0.92
6/6/2022	LCPR	PR	0.10	0.65	0.10	28.3	44	4.6	4.8	0.25	0.9
6/13/2022	LCPR	PR	0.21	0.94	0.15	22.3	26	6.0	5.8	0.30	1.24
6/20/2022	LCPR	PR	0.11	0.73	0.12	28.3	46	7.1	6.5	0.22	0.95
6/27/2022	LCPR	PR	0.09	0.69	0.04	24.7	35	5.4	11.4	0.18	0.87
7/5/2022	LCPR	PR	0.07	0.51	0.04	25.3	23	5.5	10.7	0.12	0.63
7/11/2022	LCPR	PR	0.06	0.59	<0.02	9.8	15	5.6	19.0	0.10	0.69
7/18/2022	LCPR	PR	0.11	0.85	0.03	48.9	60	5.8	13.8	0.13	0.98
7/25/2022	LCPR	PR	0.13	1.26	<0.02	20.1	33	3.8	15.8	0.07	1.33
8/1/2022	LCPR	PR	0.08	0.93	0.34	23.8	23	11.1	22.8	0.18	1.11
8/8/2022	LCPR	PR	0.07	0.86	<0.02	17.0	21	11.1	43.3	0.10	0.96
8/15/2022	LCPR	PR	0.11	0.92	<0.02	28.1	49	9.6	43.5	0.06	0.98
8/22/2022	LCPR	PR	0.10	1.10	0.08	9.7	23	8.8	18.8	0.15	1.25
8/29/2022	LCPR	PR	0.08	0.63	0.07	26.5	37	4.3	10.8	0.26	0.89
9/6/2022	LCPR	PR	0.09	0.83	0.15	8.9	17	3.8	10.7	0.12	0.95
9/12/2022	LCPR	PR	0.07	0.58	0.07	24.3	38	6.7	12.1	0.12	0.70
9/19/2022	LCPR	PR	0.08	0.70	<0.02	23.8	33	4.7	18.4	0.08	0.78
9/26/2022	LCPR	PR	0.07	0.57	<0.02	22.9	36	4.2	19.8	<0.02	NR
10/3/2022	LCPR	PR	0.06	0.64	<0.02	13.6	30	4.3	20.9	0.04	0.68

Laboratory Data
Analyzed by
Ouachita Baptist University Water Lab

Water Quality Monitoring
Lake Conway Point Removed
HUC 11110203 PJT# 19-900
Equilibrium, 5019441765

Station ID WF1
Stream Name WEST FORK POINT REMOVE CREEK
Site Location CONWAY COUNTY, PEAR TREE RD BRIDGE CROSSING
8 digit HUC 11110203
Lat 35°26'50.87"N
Long 92°42'45.64"W

Minimum Detection and Minimum Reporting Limits

Parameter	TP	TKN	NH3-N	Turbidity	TSS	Sulfate	Chloride	NO_3+NO_2-N
Units	mg/L	mg/L	mg/L	NTU	mg/L	mg/L	mg/L	mg/L
MDL	0.01	0.03	0.01	0.02	0.5	0.15	0.08	0.01
MRL	0.02	0.05	0.02	0.1	1	0.5	0.5	0.02

*NR = not reportable due to either NO3+NO2-N or TKN resulting in less than MRL

Sample Date	Watershed	Site	TP (mg/L)	TKN (mg/L)	Ammonia-N (mg/L)	Turbidity (NTU)	TSS (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	NO3+NO2-N (mg/L)	TN (mg/L)
10/15/2019	LCPR	WF1	0.04	0.46	0.06	7.9	4	3.3	1.7	0.15	0.61
10/22/2019	LCPR	WF1	0.04	0.44	0.05	5.2	6	3.6	2.0	0.08	0.52
10/29/2019	LCPR	WF1	0.05	0.34	0.04	6.4	4	3.5	1.8	0.09	0.43
11/5/2019	LCPR	WF1	0.04	0.30	0.04	6.0	4	3.8	1.9	0.16	0.46
11/12/2019	LCPR	WF1	0.04	0.33	0.03	10.1	4	3.5	1.7	0.24	0.57
11/19/2019	LCPR	WF1	0.03	0.29	0.04	6.5	4	3.8	1.8	0.27	0.56
11/24/2019	LCPR	WF1	0.05	0.35	0.02	11.8	6	3.7	1.8	0.33	0.68
12/3/2019	LCPR	WF1	0.04	0.35	<0.02	11.2	4	3.4	1.5	0.29	0.64
12/10/2019	LCPR	WF1	0.03	0.29	0.03	7.0	3	3.3	1.4	0.23	0.52
12/17/2019	LCPR	WF1	0.03	0.25	0.02	5.9	2	3.5	1.5	0.27	0.52
12/31/2019	LCPR	WF1	0.04	0.35	0.02	7.9	6	3.7	1.8	0.23	0.58
1/6/2020	LCPR	WF1	0.02	0.30	0.02	6.6	4	6.1	1.9	0.25	0.55
1/14/2020	LCPR	WF1	0.06	0.53	0.02	22.1	8	3.0	1.4	0.34	0.87
1/21/2020	LCPR	WF1	0.04	0.36	0.03	12.0	4	5.2	1.4	0.24	0.60
1/28/2020	LCPR	WF1	0.03	0.26	<0.02	9.6	3	3.4	1.5	0.27	0.53
2/4/2020	LCPR	WF1	0.03	0.29	<0.02	7.5	4	3.9	1.7	0.30	0.59
2/11/2020	LCPR	WF1	0.02	0.30	0.02	10.3	5	3.2	1.5	0.21	0.51
2/18/2020	LCPR	WF1	0.03	0.35	0.02	9.8	4	3.6	1.6	0.28	0.63
2/25/2020	LCPR	WF1	0.03	0.35	0.02	8.1	3	3.9	1.7	0.31	0.66
3/3/2020	LCPR	WF1	0.02	0.28	<0.02	6.3	4	4.6	2.1	0.28	0.56
3/10/2020	LCPR	WF1	0.03	0.29	0.03	7.1	6	3.9	1.8	0.24	0.53
3/17/2020	LCPR	WF1	0.05	0.41	0.03	14.1	7	3.4	1.5	0.25	0.66
3/24/2020	LCPR	WF1	0.04	0.46	0.03	15.3	8	3.3	1.4	0.22	0.68
3/31/2020	LCPR	WF1	0.04	0.42	0.03	10.8	8	3.3	1.3	0.14	0.56
4/7/2020	LCPR	WF1	0.04	0.36	0.02	7.0	6	2.9	1.2	0.09	0.45
4/13/2020	LCPR	WF1	0.05	0.50	0.04	13.3	7	NR	NR	NR	NR
4/21/2020	LCPR	WF1	0.03	0.46	0.02	10.2	7	3.4	1.3	0.17	0.63
4/28/2020	LCPR	WF1	0.04	0.40	0.03	11.0	7	3.8	1.7	0.14	0.54
5/5/2020	LCPR	WF1	0.04	0.37	0.04	10.3	10	3.1	1.3	0.12	0.49
5/12/2020	LCPR	WF1	0.04	0.46	0.05	8.5	7	3.1	1.3	0.08	0.54
5/19/2020	LCPR	WF1	0.05	0.45	0.03	14.0	19	3.0	1.3	0.13	0.58
5/26/2020	LCPR	WF1	0.05	0.51	0.05	12.8	10	2.9	1.2	0.11	0.62
6/2/2020	LCPR	WF1	0.05	0.58	0.06	9.2	9	2.6	1.2	0.06	0.64
6/9/2020	LCPR	WF1	0.07	0.57	0.06	13.1	14	3.0	1.4	0.13	0.70
6/16/2020	LCPR	WF1	0.06	0.47	0.05	11.8	12	2.8	1.3	0.12	0.59
6/23/2020	LCPR	WF1	0.05	0.44	0.05	8.9	8	2.5	1.1	0.15	0.59
6/30/2020	LCPR	WF1	0.04	0.59	0.04	5.5	7	2.5	1.4	0.24	0.83
7/6/2020	LCPR	WF1	0.06	0.61	0.03	11.3	14	2.6	1.3	0.06	0.67
7/13/2020	LCPR	WF1	0.05	0.49	0.03	6.9	7	2.4	1.5	0.14	0.63
7/20/2020	LCPR	WF1	0.03	0.49	0.04	5.3	4	2.4	1.5	0.30	0.79
7/27/2020	LCPR	WF1	0.04	0.46	0.04	4.2	1	2.5	1.4	0.33	0.79
8/3/2020	LCPR	WF1	0.03	0.41	0.02	4.0	6	2.5	1.4	0.25	0.66
8/10/2020	LCPR	WF1	0.04	0.47	0.07	4.3	4	2.5	1.5	0.19	0.66
8/17/2020	LCPR	WF1	0.04	0.38	0.03	4.3	3	2.2	1.4	0.19	0.57
8/24/2020	LCPR	WF1	0.04	0.46	0.06	4.1	3	2.4	1.5	0.24	0.70
8/31/2020	LCPR	WF1	0.05	0.50	0.06	6.0	8	2.2	1.4	0.23	0.73
9/6/2020	LCPR	WF1	0.05	0.53	0.04	11.3	8	2.7	1.3	0.16	0.69
9/14/2020	LCPR	WF1	0.04	0.53	0.04	5.0	4	2.8	1.5	0.18	0.71
9/21/2020	LCPR	WF1	0.04	0.50	0.03	5.3	4	3.0	1.5	0.14	0.64
9/28/2020	LCPR	WF1	0.03	0.43	0.03	4.3	3	2.8	1.5	0.12	0.55
10/5/2020	LCPR	WF1	0.04	0.42	0.02	4.3	5	2.9	1.6	0.10	0.52

Laboratory Data
Analyzed by
Ouachita Baptist University Water Lab

Water Quality Monitoring
Lake Conway Point Removed
HUC 11110203 PJT# 19-900
Equilibrium, 5019441765

Sample Date	Watershed	Site	TP (mg/L)	TKN (mg/L)	Ammonia-N (mg/L)	Turbidity (NTU)	TSS (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	NO3+NO2-N (mg/L)	TN (mg/L)
10/12/2020	LCPR	WF1	0.04	0.46	0.03	3.7	4	2.9	1.5	0.12	0.58
10/19/2020	LCPR	WF1	0.04	0.43	0.02	4.6	4	3.1	1.5	0.10	0.53
10/26/2020	LCPR	WF1	0.03	0.38	0.03	2.9	2	3.3	1.8	0.04	0.42
11/2/2020	LCPR	WF1	0.03	0.43	<0.02	7.2	5	2.9	1.6	0.04	0.47
11/10/2020	LCPR	WF1	0.03	0.46	<0.02	6.1	8	2.9	1.7	0.04	0.50
11/17/2020	LCPR	WF1	0.03	0.48	<0.02	4.9	5	3.3	1.8	0.02	0.50
11/21/2020	LCPR	WF1	0.03	0.33	<0.02	4.2	7	3.0	1.8	0.05	0.38
12/1/2020	LCPR	WF1	0.03	0.43	0.02	8.1	7	3.7	2.0	0.13	0.56
12/8/2020	LCPR	WF1	0.03	0.41	0.02	6.5	7	3.8	2.2	0.12	0.53
12/15/2020	LCPR	WF1	0.03	0.34	0.02	8.8	5	4.1	2.3	0.18	0.52
12/21/2020	LCPR	WF1	0.03	0.28	0.02	8.2	4	4.0	2.2	0.21	0.49
12/28/2020	LCPR	WF1	0.02	0.27	<0.02	7.0	4	4.0	2.2	0.22	0.49
1/5/2021	LCPR	WF1	0.04	0.47	0.02	12.8	6	3.9	2.0	0.24	0.71
1/12/2021	LCPR	WF1	0.03	0.38	0.10	9.8	2	4.0	2.1	0.28	0.66
1/19/2021	LCPR	WF1	0.02	0.23	<0.02	7.0	3	3.9	2.1	0.27	0.50
1/26/2021	LCPR	WF1	0.04	0.33	<0.02	11.3	7	3.8	2.1	0.26	0.59
2/2/2021	LCPR	WF1	0.03	0.26	<0.02	12.3	5	3.8	1.8	0.20	0.46
2/9/2021	LCPR	WF1	0.02	0.22	<0.02	9.0	2	3.8	1.9	0.20	0.42
2/23/2021	LCPR	WF1	0.02	0.22	0.02	6.9	4	4.1	2.1	0.24	0.46
3/2/2021	LCPR	WF1	0.05	0.42	0.02	15.5	5	4.2	2.2	0.31	0.73
3/8/2021	LCPR	WF1	0.03	0.25	<0.02	9.7	3	4.1	2.0	0.22	0.47
3/16/2021	LCPR	WF1	0.04	0.35	0.02	10.1	5	4.2	2.2	0.18	0.53
3/23/2021	LCPR	WF1	0.05	0.43	0.03	11.9	11	4.3	1.9	0.13	0.56
3/30/2021	LCPR	WF1	0.03	0.30	0.02	8.8	6	3.8	1.9	0.11	0.41
4/6/2021	LCPR	WF1	0.03	0.33	0.03	6.0	4	3.6	1.8	0.08	0.41
4/13/2021	LCPR	WF1	0.03	0.32	0.04	5.5	3	3.7	1.8	0.10	0.42
4/20/2021	LCPR	WF1	0.04	0.36	0.03	5.8	6	3.6	1.9	0.08	0.44
4/27/2021	LCPR	WF1	0.03	0.38	<0.02	10.1	6	3.8	1.8	0.10	0.48
5/4/2021	LCPR	WF1	0.06	0.64	0.05	19.7	13	2.9	1.3	0.11	0.75
5/11/2021	LCPR	WF1	0.04	0.46	0.02	7.0	6	2.8	1.4	0.07	0.53
5/18/2021	LCPR	WF1	0.06	0.51	0.06	11.0	9	3.4	1.8	0.16	0.67
5/25/2021	LCPR	WF1	0.05	0.46	0.04	10.3	8	3.3	1.5	0.12	0.58
6/1/2021	LCPR	WF1	0.04	0.45	0.02	10.6	12	2.8	1.4	0.06	0.51
6/8/2021	LCPR	WF1	0.06	0.44	0.02	13.3	9	2.7	1.3	0.06	0.50
6/15/2021	LCPR	WF1	0.05	0.46	0.04	8.4	6	2.6	1.3	0.06	0.52
6/22/2021	LCPR	WF1	0.06	0.48	0.11	6.8	5	2.6	1.4	0.21	0.69
6/29/2021	LCPR	WF1	0.05	0.51	0.05	6.3	5	2.3	1.4	0.19	0.70
7/6/2021	LCPR	WF1	0.04	0.42	0.03	4.6	3	2.4	1.4	0.26	0.68
7/13/2021	LCPR	WF1	0.06	1.02	0.15	6.2	4	2.5	1.7	0.26	1.28
7/20/2021	LCPR	WF1	0.07	0.56	0.03	17.9	11	3.1	1.6	0.16	0.72
7/27/2021	LCPR	WF1	0.04	0.46	0.04	6.1	4	2.5	1.5	0.25	0.71
8/3/2021	LCPR	WF1	0.05	0.41	0.03	4.9	5	3.0	1.4	0.28	0.69
8/10/2021	LCPR	WF1	0.04	0.37	0.02	5.2	4	3.0	1.6	0.27	0.64
8/17/2021	LCPR	WF1	0.04	0.37	0.03	4.2	2	2.2	1.5	0.27	0.64
8/24/2021	LCPR	WF1	0.05	0.53	0.05	3.9	1	2.4	1.6	0.38	0.91
8/31/2021	LCPR	WF1	0.05	0.46	0.08	3.7	7	2.2	1.6	0.09	0.55
9/7/2021	LCPR	WF1	0.05	0.70	0.05	3.6	3	2.1	1.6	0.05	0.75
9/14/2021	LCPR	WF1	0.06	0.68	0.04	4.2	5	1.6	1.6	<0.02	NR
9/21/2021	LCPR	WF1	0.09	0.72	0.08	14.9	13	1.6	1.5	0.11	0.83
9/28/2021	LCPR	WF1	0.05	0.50	0.05	5.7	6	1.9	1.3	0.03	0.53
10/5/2021	LCPR	WF1	0.05	0.53	0.04	4.3	4	1.9	1.1	0.02	0.55

Laboratory Data
Analyzed by
Ouachita Baptist University Water Lab

Water Quality Monitoring
Lake Conway Point Removed
HUC 11110203 PJT# 19-900
Equilibrium, 5019441765

Sample Date	Watershed	Site	TP (mg/L)	TKN (mg/L)	Ammonia-N (mg/L)	Turbidity (NTU)	TSS (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	NO3+NO2-N (mg/L)	TN (mg/L)
10/12/2021	LCPR	WF1	0.05	0.58	0.04	5.2	4	1.9	1.3	0.04	0.62
10/19/2021	LCPR	WF1	0.04	0.43	0.06	5.6	3	2.2	1.2	0.03	0.46
10/26/2021	LCPR	WF1	0.04	0.47	0.03	4.8	5	2.2	1.2	0.02	0.49
11/2/2021	LCPR	WF1	0.03	0.36	<0.02	3.3	2	3.3	1.2	0.07	0.43
11/9/2021	LCPR	WF1	0.03	0.28	<0.02	3.3	3	4.2	1.8	0.10	0.38
11/16/2021	LCPR	WF1	0.03	0.32	<0.02	4.3	3	4.7	1.6	0.23	0.55
11/22/2021	LCPR	WF1	0.03	0.28	<0.02	3.0	5	4.9	1.9	0.23	0.51
11/30/2021	LCPR	WF1	0.03	0.37	<0.02	2.4	1	4.2	2.6	0.07	0.44
12/7/2021	LCPR	WF1	0.03	0.44	<0.02	3.0	4	3.3	1.6	0.03	0.47
12/14/2021	LCPR	WF1	0.03	0.46	<0.02	3.5	3	3.3	1.6	0.03	0.49
12/19/2021	LCPR	WF1	0.06	0.96	<0.02	10.3	12	3.2	1.8	0.07	1.03
12/26/2021	LCPR	WF1	0.04	0.59	0.02	8.0	7	3.6	2.1	0.28	0.87
1/4/2022	LCPR	WF1	0.08	0.66	0.02	17.1	16	3.1	1.6	0.35	1.01
1/11/2022	LCPR	WF1	0.05	0.50	0.02	11.6	5	3.2	1.7	0.30	0.80
1/18/2022	LCPR	WF1	0.04	0.47	0.02	10.2	4	3.6	1.9	0.33	0.80
1/25/2022	LCPR	WF1	0.03	0.33	<0.02	7.9	2	3.7	1.9	0.29	0.62
2/1/2022	LCPR	WF1	0.03	0.36	<0.02	7.2	4	3.6	1.9	0.26	0.62
2/8/2022	LCPR	WF1	0.03	0.29	<0.02	5.9	3	3.7	2.1	0.24	0.53
2/15/2022	LCPR	WF1	0.02	0.27	<0.02	5.4	4	3.9	2.4	0.23	0.50
2/21/2022	LCPR	WF1	0.04	0.41	0.02	14.4	6	3.7	2.1	0.25	0.66
2/28/2022	LCPR	WF1	0.03	0.42	<0.02	8.7	5	3.6	1.8	0.28	0.70
3/7/2022	LCPR	WF1	0.03	0.31	<0.02	7.0	7	3.6	1.8	0.13	0.44
3/14/2022	LCPR	WF1	0.03	0.29	<0.02	5.7	5	3.5	1.8	0.13	0.42
3/21/2022	LCPR	WF1	0.03	0.34	<0.02	4.8	12	3.5	2.0	0.11	0.45
3/28/2022	LCPR	WF1	0.04	0.38	<0.02	11.1	5	3.0	1.4	0.10	0.48
4/4/2022	LCPR	WF1	0.03	0.36	<0.02	6.5	6	3.1	1.5	0.09	0.45
4/11/2022	LCPR	WF1	0.03	0.26	0.02	6.5	3	3.4	1.7	0.09	0.35
4/18/2022	LCPR	WF1	0.05	0.39	0.04	6.5	4	3.4	1.8	0.10	0.49
4/25/2022	LCPR	WF1	0.04	0.30	<0.02	11.1	6	3.0	1.3	0.07	0.37
5/2/2022	LCPR	WF1	0.04	0.35	0.04	6.1	5	2.9	1.5	0.07	0.42
5/9/2022	LCPR	WF1	0.03	0.35	0.04	8.7	5	3.0	1.3	0.08	0.43
5/16/2022	LCPR	WF1	0.05	0.49	0.11	4.9	5	2.7	1.5	0.07	0.56
5/23/2022	LCPR	WF1	0.05	0.37	0.04	5.7	6	3.1	1.5	0.18	0.55
5/31/2022	LCPR	WF1	0.05	0.50	0.02	6.9	9	2.8	1.5	0.07	0.57
6/6/2022	LCPR	WF1	0.04	0.40	0.02	6.0	12	2.8	1.4	0.12	0.52
6/13/2022	LCPR	WF1	0.05	0.39	0.04	5.1	6	2.7	1.5	0.16	0.55
6/20/2022	LCPR	WF1	0.04	0.39	0.02	4.0	4	2.4	1.4	0.21	0.6
6/27/2022	LCPR	WF1	0.05	0.48	0.06	4.0	7	2.3	1.7	0.25	0.73
7/5/2022	LCPR	WF1	0.05	0.53	0.10	3.6	3	1.7	1.5	0.04	0.57
7/11/2022	LCPR	WF1	0.06	0.68	0.12	3.8	7	1.0	1.9	0.08	0.76
7/18/2022	LCPR	WF1	0.10	1.05	0.22	10.0	19	2.6	2.6	0.15	1.20
7/25/2022	LCPR	WF1	0.08	0.74	0.14	5.1	5	<0.5	2.2	<0.02	NR
8/1/2022	LCPR	WF1	0.07	0.87	0.33	4.2	5	1.8	1.9	0.05	0.92
8/8/2022	LCPR	WF1	0.08	0.80	0.12	6.8	8	0.9	1.9	0.02	0.82
8/15/2022	LCPR	WF1	0.07	0.62	0.14	6.8	4	0.8	1.9	0.02	0.64
8/22/2022	LCPR	WF1	0.07	0.85	0.24	3.9	4	1.1	1.7	0.09	0.94
8/29/2022	LCPR	WF1	0.06	0.68	0.22	4.3	7	1.1	2.0	0.04	0.72
9/6/2022	LCPR	WF1	0.06	1.03	0.41	5.2	3	0.9	2.0	0.04	1.07
9/12/2022	LCPR	WF1	0.06	0.68	0.22	5.9	3	0.8	1.8	0.03	0.71
9/19/2022	LCPR	WF1	0.06	0.69	0.06	4.7	4	0.6	1.9	0.02	0.71
9/26/2022	LCPR	WF1	0.05	0.59	0.05	3.4	2	0.6	2.0	0.02	0.61

Laboratory Data
Analyzed by
Ouachita Baptist University Water Lab

Water Quality Monitoring
Lake Conway Point Removed
HUC 11110203 PJT# 19-900
Equilibrium, 5019441765

Station ID WF2
Stream Name WEST FORK POINT REMOVE CREEK
Site Location CONWAY COUNTY, Bridge Hill RD BRIDGE CROSSING
8 digit HUC 11110203
Lat 35°26'6.59"N
Long 92°43'4.08"W

Minimum Detection and Minimum Reporting Limits

Parameter	TP	TKN	NH3-N	Turbidity	TSS	Sulfate	Chloride	NO_3+NO_2-N
Units	mg/L	mg/L	mg/L	NTU	mg/L	mg/L	mg/L	mg/L
MDL	0.01	0.03	0.01	0.02	0.5	0.15	0.08	0.01
MRL	0.02	0.05	0.02	0.1	1	0.5	0.5	0.02

*NR = not reportable due to either NO3+NO2-N or TKN resulting in less than MRL

Sample Date	Watershed	Site	TP (mg/L)	TKN (mg/L)	Ammonia-N (mg/L)	Turbidity (NTU)	TSS (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	NO3+NO2-N (mg/L)	TN (mg/L)
10/15/2019	LCPR	WF2	0.05	0.34	0.05	9.0	6	2.9	1.5	0.16	0.50
10/22/2019	LCPR	WF2	0.03	0.27	0.04	7.6	5	2.9	1.6	0.12	0.39
10/29/2019	LCPR	WF2	0.03	0.32	0.03	7.3	2	2.9	1.5	0.11	0.43
11/5/2019	LCPR	WF2	0.03	0.20	0.04	9.5	2	2.8	1.4	0.14	0.34
11/12/2019	LCPR	WF2	0.04	0.31	0.03	13.7	5	3.0	1.4	0.23	0.54
11/19/2019	LCPR	WF2	0.03	0.24	0.04	9.2	5	3.0	1.4	0.24	0.48
11/24/2019	LCPR	WF2	0.03	0.26	0.02	16.5	5	3.0	1.3	0.21	0.47
12/3/2019	LCPR	WF2	0.03	0.24	0.04	11.8	2	2.7	1.2	0.20	0.44
12/10/2019	LCPR	WF2	0.03	0.27	0.02	9.7	3	2.8	1.2	0.20	0.47
12/17/2019	LCPR	WF2	0.02	0.22	<0.02	8.1	3	2.9	1.3	0.22	0.44
12/31/2019	LCPR	WF2	0.03	0.41	0.02	11.9	3	2.9	1.4	0.17	0.58
1/6/2020	LCPR	WF2	0.02	0.22	0.02	9.7	3	3.2	1.5	0.19	0.41
1/14/2020	LCPR	WF2	0.05	0.49	0.02	28.1	10	2.4	1.1	0.23	0.72
1/21/2020	LCPR	WF2	0.04	0.35	0.03	17.5	6	2.9	1.2	0.20	0.55
1/28/2020	LCPR	WF2	0.02	0.23	0.02	11.0	3	3.0	1.3	0.21	0.44
2/4/2020	LCPR	WF2	0.02	0.21	<0.02	10.2	7	3.1	1.4	0.21	0.42
2/11/2020	LCPR	WF2	0.03	0.35	0.02	9.6	6	4.3	2.4	0.51	0.86
2/18/2020	LCPR	WF2	0.03	0.30	0.03	11.9	5	2.9	1.2	0.20	0.50
2/25/2020	LCPR	WF2	0.02	0.22	<0.02	9.3	2	3.3	1.4	0.22	0.44
3/3/2020	LCPR	WF2	0.02	0.22	<0.02	8.4	5	3.3	1.5	0.20	0.42
3/10/2020	LCPR	WF2	0.02	0.35	0.03	9.3	4	3.0	1.4	0.16	0.51
3/17/2020	LCPR	WF2	0.04	0.32	0.02	19.3	7	2.7	1.2	0.17	0.49
3/24/2020	LCPR	WF2	0.03	0.34	0.02	23.1	8	2.5	1.1	0.13	0.47
3/31/2020	LCPR	WF2	0.03	0.32	0.02	16.2	7	2.5	1.1	0.11	0.43
4/7/2020	LCPR	WF2	0.04	0.33	0.02	11.1	5	2.7	1.1	0.09	0.42
4/13/2020	LCPR	WF2	0.04	0.37	0.02	18.5	9	NR	NR	NR	NR
4/21/2020	LCPR	WF2	0.03	0.31	0.02	13.0	4	2.7	1.1	0.12	0.43
4/28/2020	LCPR	WF2	0.03	0.28	0.02	12.9	9	3.2	1.5	0.12	0.40
5/5/2020	LCPR	WF2	0.03	0.34	0.06	12.0	6	2.7	1.1	0.11	0.45
5/12/2020	LCPR	WF2	0.04	0.35	0.04	11.4	10	2.6	1.2	0.12	0.47
5/19/2020	LCPR	WF2	0.04	0.36	0.03	17.1	10	2.5	1.1	0.10	0.46
5/26/2020	LCPR	WF2	0.04	0.60	0.05	15.2	11	2.5	1.1	0.10	0.70
6/2/2020	LCPR	WF2	0.05	0.43	0.05	10.8	8	2.4	1.1	0.07	0.50
6/9/2020	LCPR	WF2	0.05	0.39	0.03	11.8	10	2.5	1.2	0.12	0.51
6/16/2020	LCPR	WF2	0.04	0.29	0.03	11.0	5	2.7	1.2	0.15	0.44
6/23/2020	LCPR	WF2	0.03	0.28	0.02	10.3	5	2.2	1.2	0.18	0.46
6/30/2020	LCPR	WF2	0.02	0.23	0.02	5.7	5	2.1	1.1	0.20	0.43
7/6/2020	LCPR	WF2	0.06	0.58	0.02	10.8	13	2.6	1.3	0.08	0.66
7/13/2020	LCPR	WF2	0.04	0.37	0.03	5.3	6	2.3	2.1	0.21	0.58
7/20/2020	LCPR	WF2	0.03	0.34	0.03	4.2	3	2.1	1.3	0.23	0.57
7/27/2020	LCPR	WF2	0.03	0.30	0.03	4.2	3	2.0	1.4	0.28	0.58
8/3/2020	LCPR	WF2	0.03	0.27	<0.02	3.4	4	3.1	1.3	0.15	0.42
8/10/2020	LCPR	WF2	0.02	0.29	0.02	3.3	2	1.9	1.2	0.13	0.42
8/17/2020	LCPR	WF2	0.03	0.29	<0.02	3.4	2	2.1	1.3	0.17	0.46
8/24/2020	LCPR	WF2	0.03	0.30	0.03	3.6	5	2.8	1.5	0.16	0.46
8/31/2020	LCPR	WF2	0.03	0.33	0.02	3.9	5	2.3	1.5	0.25	0.58
9/6/2020	LCPR	WF2	0.05	0.46	0.03	15.0	11	2.4	1.1	0.17	0.63
9/14/2020	LCPR	WF2	0.03	0.35	0.03	5.0	3	2.4	1.3	0.21	0.56
9/21/2020	LCPR	WF2	0.03	0.33	0.02	4.6	3	2.4	1.3	0.18	0.51
9/28/2020	LCPR	WF2	0.02	0.29	<0.02	3.9	3	2.3	1.2	0.16	0.45
10/5/2020	LCPR	WF2	0.03	0.28	0.02	4.9	7	2.5	1.5	0.19	0.47

Laboratory Data
Analyzed by
Ouachita Baptist University Water Lab

Water Quality Monitoring
Lake Conway Point Removed
HUC 11110203 PJT# 19-900
Equilibrium, 5019441765

Sample Date	Watershed	Site	TP (mg/L)	TKN (mg/L)	Ammonia-N (mg/L)	Turbidity (NTU)	TSS (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	NO3+NO2-N (mg/L)	TN (mg/L)
10/12/2020	LCPR	WF2	0.03	0.28	<0.02	3.7	3	2.3	1.3	0.12	0.40
10/19/2020	LCPR	WF2	0.02	0.23	<0.02	4.0	3	2.4	1.3	0.13	0.36
10/26/2020	LCPR	WF2	<0.02	0.21	<0.02	2.9	1	2.5	1.7	0.10	0.31
11/2/2020	LCPR	WF2	0.03	0.30	<0.02	7.1	4	2.3	1.3	0.08	0.38
11/10/2020	LCPR	WF2	0.02	0.31	0.02	4.8	6	2.4	1.4	0.06	0.37
11/17/2020	LCPR	WF2	0.02	0.30	0.02	4.1	3	2.5	1.4	0.04	0.34
11/21/2020	LCPR	WF2	0.02	0.23	<0.02	4.2	4	2.5	1.5	0.03	0.26
12/1/2020	LCPR	WF2	0.03	0.34	0.02	10.5	6	3.0	1.7	0.18	0.52
12/8/2020	LCPR	WF2	0.03	0.30	0.02	9.2	7	3.1	1.7	0.12	0.42
12/15/2020	LCPR	WF2	0.03	0.28	0.02	12.5	4	3.3	1.9	0.15	0.43
12/21/2020	LCPR	WF2	0.02	0.20	0.02	11.8	2	3.2	1.7	0.17	0.37
12/28/2020	LCPR	WF2	0.02	0.24	0.02	10.2	11	3.2	1.8	0.17	0.41
1/5/2021	LCPR	WF2	0.03	0.30	<0.02	17.3	1	3.1	1.6	0.17	0.47
1/12/2021	LCPR	WF2	0.03	0.37	0.10	14.0	6	2.9	1.5	0.18	0.55
1/19/2021	LCPR	WF2	0.02	0.18	<0.02	9.0	1	3.2	1.6	0.21	0.39
1/26/2021	LCPR	WF2	0.03	0.30	0.02	23.4	11	2.9	1.7	0.17	0.47
2/2/2021	LCPR	WF2	0.03	0.27	<0.02	13.1	5	3.3	1.6	0.17	0.44
2/9/2021	LCPR	WF2	0.02	0.16	<0.02	10.6	3	3.1	1.5	0.14	0.30
2/23/2021	LCPR	WF2	0.02	0.16	<0.02	8.9	2	3.4	1.7	0.16	0.32
3/2/2021	LCPR	WF2	0.03	0.27	0.02	15.5	5	3.4	1.7	0.19	0.46
3/8/2021	LCPR	WF2	0.03	0.19	<0.02	10.9	2	3.4	1.7	0.14	0.33
3/16/2021	LCPR	WF2	0.04	0.32	0.02	14.4	5	3.7	1.8	0.12	0.44
3/23/2021	LCPR	WF2	0.04	0.35	0.02	15.8	13	3.4	1.5	0.09	0.44
3/30/2021	LCPR	WF2	0.03	0.28	0.02	11.4	6	3.4	1.6	0.09	0.37
4/6/2021	LCPR	WF2	0.17	0.35	0.02	19.7	28	3.0	1.4	0.06	0.41
4/13/2021	LCPR	WF2	0.03	0.35	0.05	16.1	4	2.8	1.3	0.07	0.42
4/20/2021	LCPR	WF2	0.04	0.51	0.06	11.3	5	2.9	2.5	0.06	0.57
4/27/2021	LCPR	WF2	0.03	0.28	<0.02	15.9	5	3.2	1.5	0.07	0.35
5/4/2021	LCPR	WF2	0.05	0.48	0.02	25.1	12	2.7	1.1	0.11	0.59
5/11/2021	LCPR	WF2	0.04	0.40	0.02	13.0	7	2.5	1.2	0.05	0.45
5/18/2021	LCPR	WF2	0.05	0.40	0.04	13.2	10	2.7	1.3	0.09	0.49
5/25/2021	LCPR	WF2	0.05	0.35	0.03	42.9	14	2.4	1.0	0.07	0.42
6/1/2021	LCPR	WF2	0.04	0.43	0.03	20.7	13	2.4	1.2	0.15	0.58
6/8/2021	LCPR	WF2	0.05	0.39	0.03	18.6	9	2.2	1.1	0.06	0.45
6/15/2021	LCPR	WF2	0.04	0.41	0.05	12.3	9	2.3	1.2	0.05	0.46
6/22/2021	LCPR	WF2	0.05	0.34	0.05	9.0	5	2.3	1.2	0.21	0.55
6/29/2021	LCPR	WF2	0.04	0.42	0.02	10.9	12	2.0	1.3	0.20	0.62
7/6/2021	LCPR	WF2	0.02	0.26	<0.02	5.3	3	1.9	1.1	0.16	0.42
7/13/2021	LCPR	WF2	0.03	0.30	0.02	7.7	4	2.0	1.2	0.18	0.48
7/20/2021	LCPR	WF2	0.04	0.36	0.02	9.7	6	2.7	1.3	0.16	0.52
7/27/2021	LCPR	WF2	0.03	0.25	0.02	6.2	3	1.8	1.1	0.15	0.40
8/3/2021	LCPR	WF2	0.03	0.25	<0.02	5.2	2	1.8	1.1	0.15	0.40
8/10/2021	LCPR	WF2	0.03	0.27	0.02	5.2	6	1.9	1.2	0.18	0.45
8/17/2021	LCPR	WF2	0.03	0.27	0.03	3.7	1	2.0	1.3	0.19	0.46
8/24/2021	LCPR	WF2	0.03	0.33	0.02	3.7	5	1.9	1.2	0.22	0.55
8/31/2021	LCPR	WF2	0.02	0.21	0.03	3.6	9	1.9	1.4	0.23	0.44
9/7/2021	LCPR	WF2	0.02	0.42	0.03	1.7	1	1.8	1.6	0.20	0.62
9/14/2021	LCPR	WF2	0.02	0.35	0.03	2.4	2	1.9	1.5	0.10	0.45
9/21/2021	LCPR	WF2	0.03	0.36	0.04	26.8	12	2.0	1.3	0.08	0.44
9/28/2021	LCPR	WF2	0.03	0.37	0.03	6.1	8	2.3	1.8	0.18	0.55
10/5/2021	LCPR	WF2	0.02	0.29	0.02	2.9	1	1.9	1.3	0.09	0.38

Laboratory Data
Analyzed by
Ouachita Baptist University Water Lab

Water Quality Monitoring
Lake Conway Point Removed
HUC 11110203 PJT# 19-900
Equilibrium, 5019441765

Sample Date	Watershed	Site	TP (mg/L)	TKN (mg/L)	Ammonia-N (mg/L)	Turbidity (NTU)	TSS (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	NO3+NO2-N (mg/L)	TN (mg/L)
10/12/2021	LCPR	WF2	0.02	0.28	<0.02	4.1	5	2.0	1.5	0.07	0.35
10/19/2021	LCPR	WF2	<0.02	0.49	0.02	3.0	2	2.0	1.4	0.10	0.59
10/26/2021	LCPR	WF2	0.02	0.28	<0.02	4.3	7	2.4	1.5	0.08	0.36
11/2/2021	LCPR	WF2	<0.02	0.20	<0.02	4.0	2	2.1	1.3	0.08	0.28
11/9/2021	LCPR	WF2	0.02	0.21	<0.02	3.2	5	2.3	1.6	0.12	0.33
11/16/2021	LCPR	WF2	0.02	0.19	<0.02	4.0	2	2.2	1.3	0.06	0.25
11/22/2021	LCPR	WF2	0.02	0.21	<0.02	3.2	3	2.0	1.2	0.05	0.26
11/30/2021	LCPR	WF2	0.02	0.20	<0.02	3.0	2	2.3	1.4	0.08	0.28
12/7/2021	LCPR	WF2	0.02	0.20	<0.02	3.0	5	2.3	1.3	0.07	0.27
12/14/2021	LCPR	WF2	0.02	0.27	<0.02	3.3	1	2.3	1.4	0.09	0.36
12/19/2021	LCPR	WF2	0.04	0.66	0.04	12.1	10	2.4	1.5	0.10	0.76
12/26/2021	LCPR	WF2	0.03	0.38	<0.02	9.8	7	3.1	1.7	0.27	0.65
1/4/2022	LCPR	WF2	0.06	0.57	<0.02	18.6	12	3.5	2.2	0.27	0.84
1/11/2022	LCPR	WF2	0.04	0.39	0.02	13.4	4	3.0	1.6	0.27	0.66
1/18/2022	LCPR	WF2	0.03	0.29	<0.02	11.3	7	3.5	1.8	0.25	0.54
1/25/2022	LCPR	WF2	0.02	0.26	<0.02	8.7	1	3.3	1.7	0.24	0.50
2/1/2022	LCPR	WF2	0.02	0.31	<0.02	8.2	5	3.0	1.7	0.20	0.51
2/8/2022	LCPR	WF2	0.02	0.20	<0.02	8.6	2	3.1	1.7	0.15	0.35
2/15/2022	LCPR	WF2	0.02	0.24	<0.02	8.2	4	3.1	1.9	0.14	0.38
2/21/2022	LCPR	WF2	0.03	0.26	0.02	13.0	5	3.2	1.7	0.18	0.44
2/28/2022	LCPR	WF2	0.03	0.31	<0.02	9.8	4	3.1	1.5	0.19	0.50
3/7/2022	LCPR	WF2	0.02	0.29	<0.02	8.2	6	2.9	1.4	0.09	0.38
3/14/2022	LCPR	WF2	0.02	0.24	<0.02	8.4	3	3.0	1.5	0.09	0.33
3/21/2022	LCPR	WF2	0.02	0.36	0.02	6.7	5	3.0	1.7	0.08	0.44
3/28/2022	LCPR	WF2	0.03	0.31	<0.02	13.0	4	2.7	1.2	0.08	0.39
4/4/2022	LCPR	WF2	0.03	0.27	<0.02	8.8	8	2.8	1.4	0.08	0.35
4/11/2022	LCPR	WF2	0.02	0.23	<0.02	8.9	3	3.1	1.5	0.08	0.31
4/18/2022	LCPR	WF2	0.04	0.25	0.02	9.7	4	2.8	1.4	0.06	0.31
4/25/2022	LCPR	WF2	0.03	0.26	<0.02	14.0	7	2.5	1.1	0.05	0.31
5/2/2022	LCPR	WF2	0.04	0.31	0.04	9.1	8	2.5	1.3	0.05	0.36
5/9/2022	LCPR	WF2	0.03	0.25	0.05	11.0	5	2.6	1.1	0.06	0.31
5/16/2022	LCPR	WF2	0.04	0.35	0.07	8.2	6	2.5	1.2	0.06	0.41
5/23/2022	LCPR	WF2	0.04	0.28	0.02	6.1	6	2.6	1.3	0.17	0.45
5/31/2022	LCPR	WF2	0.07	0.45	0.03	7.0	6	2.3	1.2	0.10	0.55
6/6/2022	LCPR	WF2	0.03	0.26	<0.02	5.9	6	2.3	1.2	0.14	0.4
6/13/2022	LCPR	WF2	0.04	0.31	0.03	5.5	8	2.4	1.3	0.17	0.48
6/20/2022	LCPR	WF2	0.03	0.25	0.04	4.2	3	2.1	1.1	0.15	0.4
6/27/2022	LCPR	WF2	0.02	0.28	0.02	3.4	4	2.0	1.5	0.29	0.57
7/5/2022	LCPR	WF2	0.02	0.22	0.04	3.4	3	1.8	1.2	0.14	0.36
7/11/2022	LCPR	WF2	0.03	0.48	0.06	2.8	5	1.9	1.5	0.21	0.69
7/18/2022	LCPR	WF2	0.05	0.47	0.03	7.3	12	2.2	1.4	0.05	0.52
7/25/2022	LCPR	WF2	0.03	0.45	0.08	4.1	8	1.8	1.6	0.10	0.55
8/1/2022	LCPR	WF2	0.03	0.33	0.05	8.3	4	1.6	1.3	0.11	0.44
8/8/2022	LCPR	WF2	0.03	0.47	0.06	8.1	10	1.7	1.5	0.06	0.53
8/15/2022	LCPR	WF2	0.03	0.44	0.04	4.2	5	1.7	1.4	0.04	0.48
8/22/2022	LCPR	WF2	0.02	0.28	0.04	2.6	4	1.7	1.7	0.08	0.36
8/29/2022	LCPR	WF2	0.02	0.17	0.02	2.3	3	1.8	2.0	0.12	0.29
9/6/2022	LCPR	WF2	<0.02	0.24	0.04	2.5	3	1.7	1.3	0.10	0.34
9/12/2022	LCPR	WF2	0.02	0.21	0.02	2.7	4	1.7	1.3	0.07	0.28
9/19/2022	LCPR	WF2	0.02	0.24	0.03	3.0	3	1.9	1.5	0.04	0.28
9/26/2022	LCPR	WF2	<0.02	0.24	0.02	3.3	4	2.0	1.5	0.02	0.26
10/3/2022	LCPR	WF2	0.03	0.50	0.03	7.0	12	2.1	2.2	0.02	0.52

Laboratory Data
Analyzed by
Ouachita Baptist University Water Lab

Water Quality Monitoring
Lake Conway Point Removed
HUC 11110203 PJT# 19-900
Equilibrium, 5019441765

Station ID WF3
Stream Name WEST FORK POINT REMOVE CREEK
Site Location POPE COUNTY, NEAR HWY 247 BRIDGE CROSSING AND USGS GAUGE
8 digit HUC 11110203
Lat 35°19'26.50"N
Long 92°52'22.15"W

Minimum Detection and Minimum Reporting Limits

Parameter	TP	TKN	NH3-N	Turbidity	TSS	Sulfate	Chloride	NO_3+NO_2-N
Units	mg/L	mg/L	mg/L	NTU	mg/L	mg/L	mg/L	mg/L
MDL	0.01	0.03	0.01	0.02	0.5	0.15	0.08	0.01
MRL	0.02	0.05	0.02	0.1	1	0.5	0.5	0.02

*NR = not reportable due to either NO3+NO2-N or TKN resulting in less than MRL

Sample Date	Watershed	Site	TP (mg/L)	TKN (mg/L)	Ammonia-N (mg/L)	Turbidity (NTU)	TSS (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	NO3+NO2-N (mg/L)	TN (mg/L)
10/15/2019	LCPR	WF3	0.05	0.36	0.03	7.1	2	2.9	2.1	0.27	0.63
10/22/2019	LCPR	WF3	0.04	0.42	0.05	7.4	5	3.2	2.5	0.38	0.80
10/29/2019	LCPR	WF3	0.03	0.27	0.04	5.9	3	3.1	2.4	0.37	0.64
11/5/2019	LCPR	WF3	0.04	0.30	0.05	6.5	2	3.4	2.4	0.46	0.76
11/12/2019	LCPR	WF3	0.06	0.36	0.03	12.5	4	3.3	2.1	0.59	0.95
11/19/2019	LCPR	WF3	0.03	0.37	0.02	7.5	2	3.3	2.1	0.59	0.96
11/24/2019	LCPR	WF3	0.05	0.36	0.02	15.6	9	3.1	1.9	0.48	0.84
12/3/2019	LCPR	WF3	0.04	0.31	<0.02	12.4	3	2.9	1.6	0.49	0.80
12/10/2019	LCPR	WF3	0.03	0.28	0.02	9.3	5	3.1	1.8	0.55	0.83
12/17/2019	LCPR	WF3	0.03	0.33	0.03	5.2	4	3.3	2.1	0.62	0.95
12/31/2019	LCPR	WF3	0.04	0.42	0.02	10.4	3	3.4	2.1	0.49	0.91
1/6/2020	LCPR	WF3	0.02	0.27	<0.02	8.5	1	3.3	2.1	0.50	0.77
1/14/2020	LCPR	WF3	0.07	0.49	0.03	30.7	14	2.5	1.4	0.43	0.92
1/21/2020	LCPR	WF3	0.04	0.37	0.03	17.3	7	2.9	1.6	0.46	0.83
1/28/2020	LCPR	WF3	0.03	0.26	0.02	11.8	3	3.5	2.0	0.58	0.84
2/4/2020	LCPR	WF3	0.03	0.25	0.02	9.2	5	3.4	2.1	0.56	0.81
2/11/2020	LCPR	WF3	0.03	0.51	0.02	11.3	8	3.6	2.2	0.55	1.06
2/18/2020	LCPR	WF3	0.04	0.35	0.03	14.1	7	3.2	1.7	0.45	0.80
2/25/2020	LCPR	WF3	0.03	0.27	<0.02	9.6	3	3.4	2.0	0.49	0.76
3/3/2020	LCPR	WF3	0.02	0.29	<0.02	7.2	4	3.4	2.1	0.46	0.75
3/10/2020	LCPR	WF3	0.03	0.33	0.03	6.8	4	3.4	2.3	0.48	0.81
3/17/2020	LCPR	WF3	0.05	0.31	0.02	17.7	11	3.1	1.7	0.45	0.76
3/24/2020	LCPR	WF3	0.08	0.54	0.05	25.9	21	2.8	1.5	0.35	0.89
3/31/2020	LCPR	WF3	0.10	0.59	0.03	29.1	29	2.5	1.4	0.29	0.88
4/7/2020	LCPR	WF3	0.04	0.38	0.03	9.3	8	2.9	1.5	0.30	0.68
4/13/2020	LCPR	WF3	0.06	0.49	0.03	18.9	13	NR	NR	NR	NR
4/21/2020	LCPR	WF3	0.03	0.33	0.02	10.2	4	3.0	1.7	0.31	0.64
4/28/2020	LCPR	WF3	0.04	0.40	0.03	10.8	7	3.3	2.0	0.31	0.71
5/5/2020	LCPR	WF3	0.05	0.39	0.04	11.5	7	2.9	1.6	0.31	0.70
5/12/2020	LCPR	WF3	0.04	0.58	0.04	8.4	8	3.1	1.9	0.33	0.91
5/19/2020	LCPR	WF3	0.06	0.42	0.03	16.5	17	2.8	1.5	0.28	0.70
5/26/2020	LCPR	WF3	0.15	0.83	0.04	27.1	33	2.6	1.7	0.27	1.10
6/2/2020	LCPR	WF3	0.05	0.47	0.04	10.9	10	2.4	1.5	0.23	0.70
6/9/2020	LCPR	WF3	0.06	0.48	0.04	9.3	11	2.9	1.8	0.34	0.82
6/16/2020	LCPR	WF3	0.04	0.33	0.04	6.9	5	2.9	1.8	0.26	0.59
6/23/2020	LCPR	WF3	0.04	0.38	0.03	6.8	5	2.8	1.9	0.28	0.66
6/30/2020	LCPR	WF3	0.03	0.42	0.04	4.0	5	2.7	2.1	0.22	0.64
7/6/2020	LCPR	WF3	0.07	0.49	0.04	3.9	8	2.3	1.8	0.24	0.73
7/13/2020	LCPR	WF3	0.05	0.45	0.04	4.2	10	2.5	2.1	0.12	0.57
7/20/2020	LCPR	WF3	0.03	0.44	0.03	3.4	5	2.4	2.4	0.11	0.55
7/27/2020	LCPR	WF3	0.04	0.45	0.05	3.7	6	2.3	2.6	0.14	0.59
8/3/2020	LCPR	WF3	0.04	0.43	0.03	4.5	7	2.3	2.7	0.15	0.58
8/10/2020	LCPR	WF3	0.04	0.47	0.03	4.2	2	2.4	2.9	0.15	0.62
8/17/2020	LCPR	WF3	0.04	0.42	0.03	3.1	5	2.3	2.5	0.12	0.54
8/24/2020	LCPR	WF3	0.05	0.35	0.03	4.3	7	2.4	3.1	0.09	0.44
8/31/2020	LCPR	WF3	0.05	0.43	0.04	4.0	7	1.7	2.1	0.16	0.59
9/6/2020	LCPR	WF3	0.11	0.55	0.03	17.7	15	3.0	2.4	0.45	1.00
9/14/2020	LCPR	WF3	0.05	0.36	<0.02	3.9	3	2.6	2.0	0.35	0.71
9/21/2020	LCPR	WF3	0.04	0.34	0.02	4.1	3	2.7	2.2	0.26	0.60
9/28/2020	LCPR	WF3	0.04	0.35	<0.02	3.6	3	2.8	2.6	0.32	0.67
10/5/2020	LCPR	WF3	0.03	0.33	0.02	3.1	4	3.0	2.9	0.32	0.65

Laboratory Data
Analyzed by
Ouachita Baptist University Water Lab

Water Quality Monitoring
Lake Conway Point Removed
HUC 11110203 PJT# 19-900
Equilibrium, 5019441765

Sample Date	Watershed	Site	TP (mg/L)	TKN (mg/L)	Ammonia-N (mg/L)	Turbidity (NTU)	TSS (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	NO3+NO2-N (mg/L)	TN (mg/L)
10/12/2020	LCPR	WF3	0.04	0.31	<0.02	2.9	4	3.4	2.8	0.22	0.53
10/19/2020	LCPR	WF3	0.03	0.34	0.02	3.1	4	3.1	3.1	0.22	0.56
10/26/2020	LCPR	WF3	0.03	0.29	0.03	2.8	3	3.1	3.4	0.09	0.38
11/2/2020	LCPR	WF3	0.04	0.39	0.03	5.7	3	3.8	3.1	0.45	0.84
11/10/2020	LCPR	WF3	0.02	0.29	<0.02	3.2	4	3.2	2.8	0.28	0.57
11/17/2020	LCPR	WF3	0.02	0.22	<0.02	2.1	3	3.5	2.8	0.08	0.30
11/21/2020	LCPR	WF3	0.02	0.30	<0.02	2.0	3	3.2	3.1	0.05	0.35
12/1/2020	LCPR	WF3	0.03	0.36	<0.02	7.5	5	3.4	2.7	0.36	0.72
12/8/2020	LCPR	WF3	0.03	0.30	<0.02	5.7	4	3.6	2.9	0.40	0.70
12/15/2020	LCPR	WF3	0.04	0.38	0.03	13.7	7	3.9	2.9	0.49	0.87
12/21/2020	LCPR	WF3	0.03	0.27	<0.02	8.9	2	3.7	2.8	0.50	0.77
12/28/2020	LCPR	WF3	0.02	0.24	0.02	7.0	5	3.7	2.9	0.50	0.74
1/5/2021	LCPR	WF3	0.05	0.35	0.02	16.9	4	3.4	2.3	0.55	0.90
1/12/2021	LCPR	WF3	0.04	0.25	<0.02	12.8	3	3.3	2.3	0.56	0.81
1/19/2021	LCPR	WF3	0.03	0.22	0.02	8.1	2	3.4	2.4	0.57	0.79
1/26/2021	LCPR	WF3	0.07	0.48	0.02	21.5	17	3.2	2.3	0.44	0.92
2/2/2021	LCPR	WF3	0.03	0.27	<0.02	11.3	4	4.5	3.0	0.42	0.69
2/9/2021	LCPR	WF3	0.02	0.22	<0.02	8.6	3	3.5	2.3	0.45	0.67
2/23/2021	LCPR	WF3	0.03	0.25	<0.02	9.1	6	3.9	2.7	0.48	0.73
3/2/2021	LCPR	WF3	0.05	0.42	0.03	23.6	11	3.4	2.1	0.46	0.88
3/8/2021	LCPR	WF3	0.04	0.29	<0.02	12.3	4	4.4	2.3	0.43	0.72
3/16/2021	LCPR	WF3	0.05	0.40	<0.02	15.9	12	3.5	2.3	0.34	0.74
3/23/2021	LCPR	WF3	0.07	0.50	0.02	29.6	28	3.2	2.0	0.33	0.83
3/30/2021	LCPR	WF3	0.04	0.31	0.02	10.7	10	3.9	2.8	0.30	0.61
4/6/2021	LCPR	WF3	0.04	0.42	0.02	8.0	6	3.1	2.1	0.25	0.67
4/13/2021	LCPR	WF3	0.04	0.47	0.11	10.1	7	3.4	2.2	0.29	0.76
4/20/2021	LCPR	WF3	0.04	0.32	0.03	9.3	6	3.2	2.2	0.22	0.54
4/27/2021	LCPR	WF3	0.04	0.37	0.02	14.5	9	3.3	2.1	0.22	0.59
5/4/2021	LCPR	WF3	0.14	0.78	0.04	38.4	39	2.7	1.5	0.22	1.00
5/11/2021	LCPR	WF3	0.05	0.37	0.03	16.2	10	2.7	1.5	0.22	0.59
5/18/2021	LCPR	WF3	0.10	0.54	0.03	14.8	16	2.8	1.9	0.29	0.83
5/25/2021	LCPR	WF3	0.08	0.46	0.03	28.2	20	2.6	1.3	0.23	0.69
6/1/2021	LCPR	WF3	0.09	0.58	0.05	22.8	25	2.5	1.5	0.23	0.81
6/8/2021	LCPR	WF3	0.10	0.66	0.03	26.3	29	2.2	1.3	0.18	0.84
6/15/2021	LCPR	WF3	0.05	0.36	0.04	12.0	11	2.4	1.3	0.18	0.54
6/22/2021	LCPR	WF3	0.05	0.33	0.03	7.4	7	2.7	1.7	0.32	0.65
6/29/2021	LCPR	WF3	0.05	0.38	0.03	5.7	6	2.5	2.0	0.28	0.66
7/6/2021	LCPR	WF3	0.03	0.30	0.02	3.6	4	2.8	2.0	0.25	0.55
7/13/2021	LCPR	WF3	0.04	0.37	0.03	4.0	5	2.3	1.7	0.17	0.54
7/20/2021	LCPR	WF3	0.05	0.48	0.03	5.2	8	2.6	1.6	0.19	0.67
7/27/2021	LCPR	WF3	0.04	0.34	0.03	3.7	4	2.3	1.8	0.10	0.44
8/3/2021	LCPR	WF3	0.04	0.31	0.02	2.9	2	2.3	1.9	0.08	0.39
8/10/2021	LCPR	WF3	0.04	0.39	0.03	3.8	7	2.1	1.9	0.07	0.46
8/17/2021	LCPR	WF3	0.04	0.32	<0.02	2.9	3	2.0	2.1	0.06	0.38
8/24/2021	LCPR	WF3	0.04	0.34	0.02	3.6	4	1.9	2.3	0.07	0.41
8/31/2021	LCPR	WF3	0.05	0.36	0.03	5.0	10	1.9	2.7	0.09	0.45
9/7/2021	LCPR	WF3	0.05	0.49	0.03	3.6	4	1.9	3.2	0.08	0.57
9/14/2021	LCPR	WF3	0.04	0.60	0.03	3.5	5	2.0	3.6	0.09	0.69
9/21/2021	LCPR	WF3	0.05	0.46	0.03	6.0	9	2.0	3.9	0.09	0.55
9/28/2021	LCPR	WF3	0.04	0.45	0.02	3.7	4	2.1	4.7	0.13	0.58
10/5/2021	LCPR	WF3	0.04	0.42	<0.02	3.0	2	2.0	4.4	0.07	0.49

Laboratory Data
Analyzed by
Ouachita Baptist University Water Lab

Water Quality Monitoring
Lake Conway Point Removed
HUC 11110203 PJT# 19-900
Equilibrium, 5019441765

Sample Date	Watershed	Site	TP (mg/L)	TKN (mg/L)	Ammonia-N (mg/L)	Turbidity (NTU)	TSS (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	NO3+NO2-N (mg/L)	TN (mg/L)
10/12/2021	LCPR	WF3	0.04	0.50	<0.02	3.8	5	1.9	3.7	0.09	0.59
10/19/2021	LCPR	WF3	0.03	0.38	0.02	2.9	2	2.1	4.7	0.06	0.44
10/26/2021	LCPR	WF3	0.04	0.45	<0.02	3.6	6	2.0	4.3	0.08	0.53
11/2/2021	LCPR	WF3	0.02	0.37	<0.02	2.8	3	1.8	2.5	0.03	0.40
11/9/2021	LCPR	WF3	0.03	0.31	<0.02	3.2	5	2.2	2.8	0.03	0.34
11/16/2021	LCPR	WF3	0.03	0.41	<0.02	2.4	1	2.1	2.7	<0.02	NR
11/22/2021	LCPR	WF3	0.03	0.33	<0.02	2.1	5	2.0	2.6	<0.02	NR
11/30/2021	LCPR	WF3	0.02	0.42	<0.02	1.8	2	2.3	2.7	<0.02	NR
12/7/2021	LCPR	WF3	0.02	0.31	<0.02	2.1	4	2.4	2.9	0.02	0.33
12/14/2021	LCPR	WF3	0.02	0.28	<0.02	2.4	3	2.6	3.0	<0.02	NR
12/19/2021	LCPR	WF3	0.08	0.58	0.05	15.7	9	2.8	2.5	0.42	1.00
12/26/2021	LCPR	WF3	0.03	0.43	<0.02	7.3	6	3.2	2.6	0.62	1.05
1/4/2022	LCPR	WF3	0.11	0.67	0.04	19.6	15	2.9	1.9	0.69	1.36
1/11/2022	LCPR	WF3	0.05	0.39	0.02	13.1	5	3.0	2.0	0.62	1.01
1/18/2022	LCPR	WF3	0.04	0.41	0.02	11.2	7	3.5	2.4	0.73	1.14
1/25/2022	LCPR	WF3	0.03	0.31	<0.02	7.5	2	3.8	2.5	0.67	0.98
2/1/2022	LCPR	WF3	0.02	0.33	<0.02	6.1	4	3.5	2.5	0.58	0.91
2/8/2022	LCPR	WF3	0.03	0.29	0.02	7.1	3	3.5	2.6	0.56	0.85
2/15/2022	LCPR	WF3	0.02	0.27	<0.02	6.2	4	3.5	2.7	0.46	0.73
2/21/2022	LCPR	WF3	0.03	0.32	<0.02	9.9	6	3.9	2.5	0.44	0.76
2/28/2022	LCPR	WF3	0.05	0.31	<0.02	10.3	5	3.1	1.9	0.43	0.74
3/7/2022	LCPR	WF3	0.10	0.59	<0.02	20.4	22	3.4	2.3	0.42	1.01
3/14/2022	LCPR	WF3	0.03	0.49	<0.02	6.6	4	3.4	2.2	0.29	0.78
3/21/2022	LCPR	WF3	0.03	0.35	0.04	4.4	6	3.8	2.4	0.26	0.61
3/28/2022	LCPR	WF3	0.03	0.33	<0.02	10.0	6	2.8	1.6	0.25	0.58
4/4/2022	LCPR	WF3	0.03	0.29	<0.02	7.5	6	3.0	1.8	0.22	0.51
4/11/2022	LCPR	WF3	0.03	0.24	<0.02	6.9	4	3.1	1.9	0.22	0.46
4/18/2022	LCPR	WF3	0.04	0.30	<0.02	8.7	7	3.1	2.0	0.25	0.55
4/25/2022	LCPR	WF3	0.10	0.50	<0.02	22.7	24	2.5	1.5	0.21	0.71
5/2/2022	LCPR	WF3	0.05	0.27	0.03	9.2	11	3.0	1.8	0.22	0.49
5/9/2022	LCPR	WF3	0.04	0.25	<0.02	12.2	8	2.6	1.4	0.18	0.43
5/16/2022	LCPR	WF3	0.10	0.56	0.05	12.3	16	2.8	1.9	0.29	0.85
5/23/2022	LCPR	WF3	0.05	0.35	0.02	5.8	6	2.8	1.8	0.32	0.67
5/31/2022	LCPR	WF3	0.04	0.38	0.03	4.4	6	2.9	2.0	0.24	0.62
6/6/2022	LCPR	WF3	0.04	0.33	0.03	5.8	5	2.9	2.0	0.26	0.59
6/13/2022	LCPR	WF3	0.07	0.48	0.05	5.7	9	2.9	2.4	0.28	0.76
6/20/2022	LCPR	WF3	0.05	0.35	0.03	4.4	5	2.8	2.4	0.22	0.57
6/27/2022	LCPR	WF3	0.05	0.39	0.03	3.9	5	2.5	2.8	0.15	0.54
7/5/2022	LCPR	WF3	0.05	0.40	0.02	4.2	5	2.6	3.1	0.14	0.54
7/11/2022	LCPR	WF3	0.06	0.54	0.05	4.5	9	2.4	3.6	0.18	0.72
7/18/2022	LCPR	WF3	0.06	0.56	0.03	4.4	11	2.1	3.8	0.16	0.72
7/25/2022	LCPR	WF3	0.05	0.56	0.05	4.0	7	1.8	4.3	0.14	0.70
8/1/2022	LCPR	WF3	0.06	0.52	0.06	5.2	5	1.9	4.1	0.14	0.66
8/8/2022	LCPR	WF3	0.05	0.63	0.02	4.3	9	2.0	4.3	0.10	0.73
8/15/2022	LCPR	WF3	0.05	0.45	0.03	5.7	8	2.1	4.2	0.16	0.61
8/22/2022	LCPR	WF3	0.04	0.47	0.04	2.9	6	1.4	2.7	0.13	0.60
8/29/2022	LCPR	WF3	0.05	0.45	0.04	6.0	10	1.8	3.2	0.11	0.56
9/6/2022	LCPR	WF3	0.05	0.50	0.06	3.5	6	1.7	3.8	0.10	0.60
9/12/2022	LCPR	WF3	0.05	0.45	0.02	4.9	8	1.6	3.5	0.12	0.57
9/19/2022	LCPR	WF3	0.04	0.47	0.02	4.1	5	1.8	3.7	0.08	0.55
9/26/2022	LCPR	WF3	0.04	0.40	<0.02	2.9	4	1.8	4.2	0.09	0.49
10/3/2022	LCPR	WF3	0.03	0.43	0.03	2.8	5	1.7	4.8	0.14	0.57

Laboratory Data
Analyzed by
Ouachita Baptist University Water Lab

Water Quality Monitoring
Lake Conway Point Removed
HUC 11110203 PJT# 19-900
Equilibrium, 5019441765

Station ID WO
Stream Name White Oak Creek
Site Location POPE COUNTY, AT UNION GROVE RD BRIDGE CROSSING
8 digit HUC 11110203
Lat 35°15'16.96"N
Long 92°53'38.97"W

Minimum Detection and Minimum Reporting Limits

Parameter	TP	TKN	NH3-N	Turbidity	TSS	Sulfate	Chloride	NO_3+NO_2-N
Units	mg/L	mg/L	mg/L	NTU	mg/L	mg/L	mg/L	mg/L
MDL	0.01	0.03	0.01	0.02	0.5	0.15	0.08	0.01
MRL	0.02	0.05	0.02	0.1	1	0.5	0.5	0.02

*NR = not reportable due to either NO3+NO2-N or TKN resulting in less than MRL

Sample Date	Watershed	Site	TP (mg/L)	TKN (mg/L)	Ammonia-N (mg/L)	Turbidity (NTU)	TSS (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	NO3+NO2-N (mg/L)	TN (mg/L)
10/15/2019	LCPR	WO	0.07	0.75	0.06	14.0	2	11.9	7.8	0.38	1.13
10/22/2019	LCPR	WO	0.11	0.90	0.05	29.0	6	10.1	7.9	0.23	1.13
10/29/2019	LCPR	WO	0.07	0.62	0.07	14.2	3	12.3	11.9	0.30	0.92
11/5/2019	LCPR	WO	0.08	0.65	0.05	19.7	4	14.3	10.9	0.30	0.95
11/12/2019	LCPR	WO	0.20	1.03	0.06	43.8	9	11.3	7.7	0.21	1.24
11/19/2019	LCPR	WO	0.08	0.47	0.09	17.8	5	16.1	12.8	0.26	0.73
11/24/2019	LCPR	WO	0.15	0.96	0.03	31.0	7	13.9	9.9	0.18	1.14
12/3/2019	LCPR	WO	0.10	0.58	0.05	30.3	5	12.4	8.7	0.30	0.88
12/10/2019	LCPR	WO	0.07	0.51	0.06	17.0	5	14.7	13.1	0.22	0.73
12/17/2019	LCPR	WO	0.06	0.45	0.06	14.1	3	16.8	18.5	0.20	0.65
12/31/2019	LCPR	WO	0.13	1.21	0.12	32.6	7	13.8	11.0	0.21	1.42
1/6/2020	LCPR	WO	0.10	0.88	0.22	22.1	3	17.2	16.4	0.24	1.12
1/14/2020	LCPR	WO	0.71	4.46	0.53	34.9	20	13.1	12.4	0.38	4.84
1/21/2020	LCPR	WO	0.07	0.66	0.17	21.4	5	17.3	17.7	0.32	0.98
1/28/2020	LCPR	WO	0.08	0.62	0.10	21.1	5	15.1	14.1	0.30	0.92
2/4/2020	LCPR	WO	0.07	0.63	0.08	18.2	5	17.2	19.2	0.29	0.92
2/11/2020	LCPR	WO	0.12	0.99	0.08	34.1	10	10.4	8.2	0.37	1.36
2/18/2020	LCPR	WO	0.15	1.16	0.09	52.6	29	9.6	8.3	0.21	1.37
2/25/2020	LCPR	WO	0.09	0.72	0.07	23.8	4	14.1	12.6	0.23	0.95
3/3/2020	LCPR	WO	0.05	0.53	0.03	14.4	5	18.7	25.0	0.23	0.76
3/10/2020	LCPR	WO	0.12	1.23	0.16	31.2	19	13.9	15.8	0.31	1.54
3/17/2020	LCPR	WO	0.11	0.80	0.07	35.1	12	9.6	7.5	0.23	1.03
3/24/2020	LCPR	WO	0.20	1.55	0.12	38.0	38	7.1	5.5	0.15	1.70
3/31/2020	LCPR	WO	0.18	1.22	0.07	40.9	55	4.3	2.9	0.16	1.38
4/7/2020	LCPR	WO	0.27	0.91	0.17	17.6	9	12.2	14.6	0.22	1.13
4/13/2020	LCPR	WO	0.13	1.07	0.08	33.2	20	NR	NR	NR	NR
4/21/2020	LCPR	WO	0.10	0.80	0.07	24.4	8	11.8	11.6	0.21	1.01
4/28/2020	LCPR	WO	0.10	0.78	0.10	21.8	10	12.8	14.0	0.27	1.05
5/5/2020	LCPR	WO	0.20	1.50	0.15	53.3	47	8.1	8.2	0.28	1.78
5/12/2020	LCPR	WO	0.10	2.08	0.88	10.3	14	12.8	20.1	0.35	2.43
5/19/2020	LCPR	WO	0.09	0.78	0.08	27.6	10	10.2	9.1	0.31	1.09
5/26/2020	LCPR	WO	0.10	0.77	0.05	18.4	11	11.0	14.4	0.29	1.06
6/2/2020	LCPR	WO	0.07	0.61	0.04	14.8	4	13.4	20.2	0.46	1.07
6/9/2020	LCPR	WO	0.20	1.49	0.10	35.5	31	11.5	6.2	0.24	1.73
6/16/2020	LCPR	WO	0.06	0.54	0.03	6.7	3	20.3	36.9	0.74	1.28
6/23/2020	LCPR	WO	0.04	0.62	0.03	3.3	3	24.8	56.9	0.50	1.12
6/30/2020	LCPR	WO	0.03	0.49	0.03	2.1	3	93.2	26.7	0.28	0.77
7/6/2020	LCPR	WO	0.06	0.62	0.04	4.5	3	14.8	50.9	0.61	1.23
7/13/2020	LCPR	WO	0.06	0.76	0.06	3.3	4	13.6	37.6	<0.02	NR
7/20/2020	LCPR	WO	0.04	0.57	0.04	3.0	10	21.1	69.4	0.13	0.70
7/27/2020	LCPR	WO	0.19	1.81	0.42	12.9	13	9.9	55.1	0.40	2.21
8/3/2020	LCPR	WO	0.16	0.60	0.06	5.1	4	11.3	27.1	0.97	1.57
8/10/2020	LCPR	WO	2.37	16.30	15.10	7.4	15	3.1	99.0	<0.02	NR
8/17/2020	LCPR	WO	4.77	13.10	11.50	6.5	10	5.3	48.9	0.12	13.22
8/24/2020	LCPR	WO	1.30	8.50	6.20	14.5	23	8.0	53.7	0.17	8.67
8/31/2020	LCPR	WO	0.35	1.62	0.75	16.0	13	12.2	12.3	1.21	2.83
9/6/2020	LCPR	WO	0.15	0.97	0.17	17.2	4	14.7	8.6	0.92	1.89
9/14/2020	LCPR	WO	0.11	0.68	0.12	6.6	2	16.6	23.0	1.36	2.04
9/21/2020	LCPR	WO	0.17	0.75	0.09	5.2	3	11.9	9.1	0.80	1.55
9/28/2020	LCPR	WO	0.18	0.96	0.02	19.9	9	12.1	13.1	1.03	1.99
10/5/2020	LCPR	WO	2.79	5.50	0.02	15.0	23	7.3	19.4	<0.02	NR

Laboratory Data
Analyzed by
Ouachita Baptist University Water Lab

Water Quality Monitoring
Lake Conway Point Removed
HUC 11110203 PJT# 19-900
Equilibrium, 5019441765

Sample Date	Watershed	Site	TP (mg/L)	TKN (mg/L)	Ammonia-N (mg/L)	Turbidity (NTU)	TSS (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	NO3+NO2-N (mg/L)	TN (mg/L)
10/12/2020	LCPR	WO	1.92	6.45	0.03	23.9	19	1.0	35.9	<0.02	NR
10/19/2020	LCPR	WO	2.90	9.90	0.04	65.4	17	0.9	59.6	<0.02	NR
10/26/2020	LCPR	WO	3.85	12.40	0.06	66.3	39	2.1	58.5	<0.02	NR
11/2/2020	LCPR	WO	0.64	1.70	0.38	27.5	11	12.3	11.3	0.39	2.09
11/10/2020	LCPR	WO	0.44	1.24	0.17	5.6	8	10.6	21.5	0.19	1.43
11/17/2020	LCPR	WO	0.26	1.02	0.02	2.0	4	9.5	27.1	0.04	1.06
11/21/2020	LCPR	WO	0.20	1.00	0.13	2.0	5	7.0	32.7	0.05	1.05
12/1/2020	LCPR	WO	0.19	1.00	0.24	23.3	6	16.2	14.9	0.25	1.25
12/8/2020	LCPR	WO	0.20	1.12	0.45	19.4	7	16.6	13.8	0.37	1.49
12/15/2020	LCPR	WO	0.18	1.03	0.08	46.4	9	13.9	8.7	0.38	1.41
12/21/2020	LCPR	WO	0.15	0.71	0.11	21.1	7	16.2	12.4	0.39	1.10
12/28/2020	LCPR	WO	0.14	0.80	0.17	21.2	8	18.2	17.6	0.35	1.15
1/5/2021	LCPR	WO	0.10	0.68	0.06	33.5	8	15.7	10.9	0.37	1.05
1/12/2021	LCPR	WO	0.08	0.59	0.07	22.9	4	15.3	11.1	0.35	0.94
1/19/2021	LCPR	WO	0.14	1.20	0.51	10.9	7	17.9	17.6	0.36	1.56
1/26/2021	LCPR	WO	0.18	1.11	0.07	52.0	18	9.1	7.1	0.23	1.34
2/2/2021	LCPR	WO	0.08	0.52	0.05	26.2	5	18.1	13.9	0.23	0.75
2/9/2021	LCPR	WO	0.08	0.66	0.12	22.1	10	18.8	17.0	0.30	0.96
2/23/2021	LCPR	WO	0.11	0.85	0.05	39.9	17	12.8	13.5	0.24	1.09
3/2/2021	LCPR	WO	0.09	0.78	0.06	38.6	10	11.2	10.5	0.34	1.12
3/8/2021	LCPR	WO	0.06	0.49	0.05	27.1	6	16.0	17.6	0.33	0.82
3/16/2021	LCPR	WO	0.13	1.07	0.04	34.8	15	13.1	14.2	0.16	1.23
3/23/2021	LCPR	WO	0.28	1.63	0.08	84.9	137	5.9	5.7	0.31	1.94
3/30/2021	LCPR	WO	0.07	0.56	0.05	19.9	10	13.1	14.8	0.02	0.58
4/6/2021	LCPR	WO	0.07	0.54	0.08	13.5	6	15.5	25.7	0.20	0.74
4/13/2021	LCPR	WO	0.09	0.86	0.20	13.2	11	16.2	29.3	0.40	1.26
4/20/2021	LCPR	WO	0.12	1.01	0.08	28.5	15	15.5	22.3	0.42	1.43
4/27/2021	LCPR	WO	0.10	0.82	0.07	22.7	8	14.0	16.7	0.41	1.23
5/4/2021	LCPR	WO	0.22	1.55	0.06	53.6	70	4.4	3.8	0.11	1.66
5/11/2021	LCPR	WO	0.10	0.75	0.11	25.9	11	11.8	17.3	0.37	1.12
5/18/2021	LCPR	WO	0.15	1.13	0.08	35.0	29	7.5	7.2	0.20	1.33
5/25/2021	LCPR	WO	0.12	0.84	0.23	21.2	12	10.8	13.4	0.37	1.21
6/1/2021	LCPR	WO	0.20	1.38	0.30	71.0	73	9.2	10.0	0.28	1.66
6/8/2021	LCPR	WO	0.34	1.51	0.47	28.5	21	7.7	9.2	0.34	1.85
6/15/2021	LCPR	WO	0.10	0.68	0.05	14.5	5	13.3	23.3	0.59	1.27
6/22/2021	LCPR	WO	0.20	1.55	0.55	25.5	23	12.6	15.6	0.68	2.23
6/29/2021	LCPR	WO	0.71	8.50	7.80	4.5	11	12.2	111.4	0.66	9.16
7/6/2021	LCPR	WO	0.33	1.66	1.05	4.2	7	12.4	25.0	1.43	3.09
7/13/2021	LCPR	WO	0.17	2.60	1.99	3.0	3	10.9	72.8	1.66	4.26
7/20/2021	LCPR	WO	0.36	1.16	0.39	20.1	12	12.1	12.4	1.26	2.42
7/27/2021	LCPR	WO	0.21	0.82	0.15	2.7	2	11.8	30.5	0.64	1.46
8/3/2021	LCPR	WO	0.14	0.94	0.39	2.1	4	9.6	75.5	1.30	2.24
8/10/2021	LCPR	WO	0.11	0.80	0.08	1.3	3	8.1	104.7	0.55	1.35
8/17/2021	LCPR	WO	0.09	0.71	0.03	0.9	1	8.4	118.1	0.47	1.18
8/24/2021	LCPR	WO	0.22	0.70	0.08	2.4	2	9.8	26.2	0.30	1.00
8/31/2021	LCPR	WO	0.16	0.63	0.06	1.6	3	4.9	22.9	0.24	0.87
9/7/2021	LCPR	WO	0.95	5.75	4.05	2.5	5	9.4	53.7	0.09	5.84
9/14/2021	LCPR	WO	0.29	1.07	0.36	1.6	3	5.8	44.8	0.32	1.39
9/21/2021	LCPR	WO	0.39	3.03	0.34	233.0	230	8.6	5.9	0.91	3.94
9/28/2021	LCPR	WO	0.14	0.66	0.09	8.7	3	12.3	8.4	0.48	1.14
10/5/2021	LCPR	WO	0.11	0.66	0.05	3.6	2	12.9	24.1	0.37	1.03

Laboratory Data
Analyzed by
Ouachita Baptist University Water Lab

Water Quality Monitoring
Lake Conway Point Removed
HUC 11110203 PJT# 19-900
Equilibrium, 5019441765

Sample Date	Watershed	Site	TP (mg/L)	TKN (mg/L)	Ammonia-N (mg/L)	Turbidity (NTU)	TSS (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	NO3+NO2-N (mg/L)	TN (mg/L)
10/12/2021	LCPR	WO	0.20	0.82	0.13	5.9	2	10.5	23.4	1.31	2.13
10/19/2021	LCPR	WO	0.48	2.53	1.91	3.2	1	7.0	22.7	1.97	4.50
10/26/2021	LCPR	WO	0.24	1.31	0.27	23.1	11	10.2	12.7	1.12	2.43
11/2/2021	LCPR	WO	0.22	0.66	<0.02	6.8	3	10.3	8.1	0.58	1.24
11/9/2021	LCPR	WO	0.18	0.72	0.03	5.7	4	11.7	15.4	0.91	1.63
11/16/2021	LCPR	WO	0.14	0.51	<0.02	13.9	5	9.9	10.8	0.35	0.86
11/22/2021	LCPR	WO	0.26	1.11	0.09	15.0	16	11.5	13.0	0.32	1.43
11/30/2021	LCPR	WO	0.21	0.80	0.08	10.3	7	9.8	16.5	0.28	1.08
12/7/2021	LCPR	WO	0.36	2.03	1.15	5.6	7	7.9	20.1	0.17	2.20
12/14/2021	LCPR	WO	3.92	11.30	5.87	22.0	30	2.5	37.0	0.02	11.32
12/19/2021	LCPR	WO	0.21	1.31	0.16	65.0	24	13.2	6.4	0.48	1.79
12/26/2021	LCPR	WO	0.18	1.13	0.21	18.2	4	17.2	13.2	0.69	1.82
1/4/2022	LCPR	WO	0.12	1.03	0.19	39.1	10	14.2	8.4	0.76	1.79
1/11/2022	LCPR	WO	0.10	0.79	0.17	35.5	6	15.1	9.3	0.56	1.35
1/18/2022	LCPR	WO	0.11	0.90	0.23	35.4	10	14.7	11.4	0.51	1.41
1/25/2022	LCPR	WO	1.49	3.47	1.37	14.6	13	16.5	18.2	0.32	3.79
2/1/2022	LCPR	WO	0.34	1.88	1.08	18.7	12	15.7	15.5	0.32	2.20
2/8/2022	LCPR	WO	0.10	0.86	0.17	25.0	7	16.4	24.0	0.40	1.26
2/15/2022	LCPR	WO	0.14	0.80	0.23	14.7	7	18.2	20.6	0.27	1.07
2/21/2022	LCPR	WO	0.09	0.79	0.13	26.2	8	15.8	15.8	0.40	1.19
2/28/2022	LCPR	WO	0.07	0.71	0.04	22.2	6	12.9	12.2	0.37	1.08
3/7/2022	LCPR	WO	0.18	1.27	0.06	48.8	43	6.5	7.2	0.28	1.55
3/14/2022	LCPR	WO	0.07	0.57	0.03	26.5	8	14.0	14.4	0.17	0.74
3/21/2022	LCPR	WO	0.10	0.61	<0.02	19.9	11	15.5	18.3	0.06	0.67
3/28/2022	LCPR	WO	0.07	0.56	0.02	22.7	10	12.0	12.3	0.11	0.67
4/4/2022	LCPR	WO	0.07	0.63	0.02	23.6	13	11.8	13.2	0.10	0.73
4/11/2022	LCPR	WO	0.06	0.50	<0.02	26.3	17	12.3	14.6	0.08	0.58
4/18/2022	LCPR	WO	0.12	1.09	0.09	28.1	16	9.5	9.1	0.20	1.29
4/25/2022	LCPR	WO	0.22	1.31	0.04	48.3	67	3.8	3.3	0.11	1.42
5/2/2022	LCPR	WO	0.35	1.97	0.37	130.0	234	10.3	16.7	0.28	2.25
5/9/2022	LCPR	WO	0.13	1.06	0.46	24.8	13	9.8	12.1	0.17	1.23
5/16/2022	LCPR	WO	0.37	2.47	1.37	23.3	20	9.0	11.2	0.12	2.59
5/23/2022	LCPR	WO	0.26	1.81	0.79	27.4	20	11.3	11.9	0.56	2.37
5/31/2022	LCPR	WO	0.21	1.33	0.50	10.4	12	12.6	36.1	1.25	2.58
6/6/2022	LCPR	WO	0.17	1.06	0.45	9.9	10	11.6	49.9	1.63	2.69
6/13/2022	LCPR	WO	2.60	10.70	6.05	25.7	38	10.6	22.4	0.05	10.75
6/20/2022	LCPR	WO	0.44	4.96	4.20	7.9	12	6.0	32.7	0.49	5.45
6/27/2022	LCPR	WO	0.24	3.27	2.43	4.4	5	7.0	55.8	1.07	4.34
7/5/2022	LCPR	WO	0.13	1.35	0.76	3.8	4	10.3	70.0	1.52	2.87
7/11/2022	LCPR	WO	0.11	0.85	0.17	3.4	5	13.7	109.0	1.65	2.50
7/18/2022	LCPR	WO	0.41	2.69	0.48	180.0	183	8.3	7.0	1.12	3.81
7/25/2022	LCPR	WO	0.16	1.10	0.16	6.0	6	11.9	16.4	0.87	1.97
8/1/2022	LCPR	WO	0.24	2.62	1.71	9.4	8	10.5	19.6	1.60	4.22
8/8/2022	LCPR	WO	0.12	0.88	0.05	4.2	10	11.4	22.8	0.95	1.83
8/15/2022	LCPR	WO	0.06	0.51	0.03	2.6	3	11.6	45.4	0.49	1.00
8/22/2022	LCPR	WO	0.16	0.88	0.10	14.2	8	14.1	12.6	1.02	1.90
8/29/2022	LCPR	WO	0.11	0.54	0.07	6.2	6	13.7	9.2	0.78	1.32
9/6/2022	LCPR	WO	0.37	2.06	1.29	26.7	10	8.3	5.1	0.83	2.89
9/12/2022	LCPR	WO	0.16	0.78	0.11	3.3	4	8.7	13.2	1.05	1.83
9/19/2022	LCPR	WO	0.09	0.69	0.04	2.1	2	9.0	12.4	0.19	0.88
9/26/2022	LCPR	WO	0.08	2.88	1.47	5.3	6	9.3	14.2	0.08	2.96

Appendix II
In-situ Data

In-Situ Data
(Daily Average)

Water Quality Monitoring
Lake Conway Point Removed
HUC 11110203 PJT# 19-900
Equilibrium, 5019441765

Station ID CYP
Stream Name CYPRESS CREEK
Site Location PERRY COUNTY, AT HWY 113 BRIDGE CROSSING
8 digit HUC 11110203
Lat 35° 4'2.13"N
Long 92°44'32.21"W

Sample Date	Site	Temperature (°F)	Dissolved Oxygen (mg/L)	Specific Conductance (uS/cm)	pH (S.U.)
11/12/2019	CYP	41.7	8.2	153.0	8.70
12/10/2019	CYP	49.5	8.3	84.4	6.34
12/17/2019	CYP	42.5	9.9	86.4	6.47
12/31/2019	CYP	45.9	9.0	95.6	6.53
1/6/2020	CYP	42.0	10.2	160.6	7.15
1/14/2020	CYP	51.0	11.3	7.1	6.23
1/21/2020	CYP	40.0	10.7	133.8	5.65
1/28/2020	CYP	46.9	10.4	57.9	6.98
2/4/2020	CYP	49.7	9.5	127.5	4.87
2/11/2020	CYP	47.2	9.5	116.9	4.83
2/18/2020	CYP	51.9	8.8	51.6	7.13
2/25/2020	CYP	48.3	10.0	118.9	5.11
3/3/2020	CYP	52.3	8.8	127.2	4.95
3/10/2020	CYP	55.8	8.6	75.5	7.26
3/17/2020	CYP	47.7	8.6	112.8	6.41
3/24/2020	CYP	56.1	6.9	58.7	7.46
3/31/2020	CYP	51.8	8.7	91.5	6.27
4/7/2020	CYP	64.1	5.6	57.6	7.42
4/13/2020	CYP	54.0		103.3	6.08
4/21/2020	CYP	61.0	7.8	61.1	7.93
4/28/2020	CYP	58.1	6.5	106.4	6.15
5/5/2020	CYP	68.7	6.1	64.0	7.81
5/12/2020	CYP	55.2	8.0	121.1	7.11
5/19/2020	CYP	68.2	8.7	4.6	6.97
6/2/2020	CYP	69.8	5.3	64.8	7.47
6/9/2020	CYP	66.4	5.8	109.4	7.17
6/16/2020	CYP	75.1	4.9	69.9	7.85
6/22/2020	CYP	76.6	4.8	75.0	7.09
6/30/2020	CYP	76.0	4.0	85.3	7.97
7/6/2020	CYP	78.3	4.6	90.5	8.01
7/13/2020	CYP	72.8	5.8	161.7	7.74
7/20/2020	CYP	82.2	4.4	108.9	7.39
8/3/2020	CYP	77.4	4.7	104.2	7.66
8/10/2020	CYP	71.9	5.5	125.7	8.17
8/17/2020	CYP	77.8	4.9	118.6	8.21
8/24/2020	CYP	69.1	5.0	172.4	8.11
8/31/2020	CYP	68.8	4.0	116.4	8.12
9/6/2020	CYP	77.3	4.6	67.7	8.06
9/14/2020	CYP	75.1	4.9	80.4	8.20
9/21/2020	CYP	62.2	6.4	129.2	8.29
10/5/2020	CYP	55.4	6.4	141.5	8.10
10/12/2020	CYP	72.5	6.1	106.7	7.39
10/19/2020	CYP	60.9	6.4	146.6	7.55
10/26/2020	CYP	57.6	4.1	117.2	7.51
11/2/2020	CYP	47.5	7.5	112.7	5.88
11/10/2020	CYP	57.5	7.9	155.7	8.05
11/17/2020	CYP	49.7	6.7	117.8	8.38
11/21/2020	CYP	50.3	7.1	155.0	7.56
12/8/2020	CYP	40.7	8.8	157.5	7.42
12/28/2020	CYP	38.9	11.1	196.3	9.65

In-Situ Data
(Daily Average)

Water Quality Monitoring
Lake Conway Point Removed
HUC 11110203 PJT# 19-900
Equilibrium, 5019441765

Sample Date	Site	Temperature (°F)	Dissolved Oxygen (mg/L)	Specific Conductance (uS/cm)	pH (S.U.)
1/12/2021	CYP	34.3	11.3	135.5	8.57
1/26/2021	CYP	48.0	8.8	111.7	12.11
2/2/2021	CYP	42.3	10.4	121.8	4.06
2/9/2021	CYP	42.3	11.0	83.8	7.40
2/23/2021	CYP	38.6	11.2	93.6	6.65
3/2/2021	CYP	47.9	8.1	52.0	6.33
3/8/2021	CYP	51.8	9.7	62.3	7.03
3/16/2021	CYP	59.0	7.5	82.5	6.91
3/23/2021	CYP	56.5	8.5	59.8	7.37
3/30/2021	CYP	57.9	6.8	61.8	6.84
4/6/2021	CYP	60.8	7.3	69.6	7.21
4/13/2021	CYP	64.6	6.4	82.1	7.29
4/20/2021	CYP	61.4	7.6	82.3	6.64
4/27/2021	CYP	66.2	6.4	86.1	6.90
5/4/2021	CYP	68.3	4.2	76.3	7.32
5/11/2021	CYP	62.6	6.6	70.0	7.18
5/18/2021	CYP	66.9	4.9	47.6	6.90
5/25/2021	CYP	70.8	3.8	51.9	6.43
6/1/2021	CYP	65.9	6.4	60.4	6.77
6/8/2021	CYP	70.9	5.4	61.9	6.71
6/15/2021	CYP	76.8	4.6	78.2	7.06
6/22/2021	CYP	74.3	4.2	87.6	6.95
6/29/2021	CYP	80.1	4.4	92.1	7.04
7/6/2021	CYP	76.9	6.5	101.8	9.23
7/13/2021	CYP	77.4	5.1	117.1	7.93
7/20/2021	CYP	76.1	4.3	99.5	10.88
7/27/2021	CYP	81.7	5.2	118.6	7.69
8/3/2021	CYP	78.4	4.5	134.0	9.88
8/10/2021	CYP	80.1	4.0	139.6	7.29
8/17/2021	CYP	80.2	4.7	127.5	7.24
8/24/2021	CYP	79.9	3.8	168.2	8.10
8/31/2021	CYP	79.0	4.9	108.6	7.30
9/7/2021	CYP	75.5	5.3	139.8	7.29
9/14/2021	CYP	76.8	5.5	139.2	7.31
9/21/2021	CYP	74.3	4.5	117.4	7.94
9/28/2021	CYP	66.3	5.3	118.7	8.09
10/5/2021	CYP	68.3	5.2	119.8	7.17
10/12/2021	CYP	64.8	4.9	121.1	7.88
10/19/2021	CYP	57.4	4.0	129.5	7.15
10/26/2021	CYP	60.5	3.4	125.0	8.56
11/2/2021	CYP	54.3	2.1	117.4	6.96
11/9/2021	CYP	48.5	7.2	99.2	8.72
11/16/2021	CYP	49.1	4.7	98.9	6.81
11/30/2021	CYP	43.5	5.2	108.2	6.70
12/7/2021	CYP	46.5	4.9	114.3	2.32
12/14/2021	CYP	47.1	5.2	117.3	6.96
12/26/2021	CYP	53.9	6.9	66.4	6.34
1/4/2022	CYP	39.8	9.4	53.6	6.25
1/11/2022	CYP	39.9	10.1	46.4	6.27
1/18/2022	CYP	39.6	11.3	48.9	6.44
1/25/2022	CYP	40.8	11.2	56.8	6.74
2/8/2022	CYP	39.3	11.4	53.9	6.44
2/15/2022	CYP	45.0	10.7	61.0	6.53
2/21/2022	CYP	48.5	9.7	57.5	6.49
2/28/2022	CYP	44.7	10.5	42.6	6.46
3/7/2022	CYP	56.2	8.7	46.8	6.52
3/14/2022	CYP	47.9	10.5	51.4	6.59

In-Situ Data
(Daily Average)

Water Quality Monitoring
Lake Conway Point Removed
HUC 11110203 PJT# 19-900
Equilibrium, 5019441765

Sample Date	Site	Temperature (°F)	Dissolved Oxygen (mg/L)	Specific Conductance (uS/cm)	pH (S.U.)
3/21/2022	CYP	57.8	9.4	54.0	6.48
3/28/2022	CYP	54.2	6.8	39.1	6.04
4/4/2022	CYP	59.3	8.1	47.0	6.47
4/11/2022	CYP	62.7	7.6	44.7	6.41
4/18/2022	CYP	59.5	7.8	56.1	6.20
4/25/2022	CYP	66.6	5.5	58.8	6.03
5/2/2022	CYP	64.6	7.4	61.1	6.41
5/9/2022	CYP	67.8	4.1	60.9	6.12
5/16/2022	CYP	73.3	4.0	79.0	6.36
5/23/2022	CYP	66.2	5.5	78.0	6.18
6/6/2022	CYP	72.9	5.4	92.6	6.60
6/13/2022	CYP	75.5	4.1	85.8	5.95
6/20/2022	CYP	76.4	4.3	85.3	6.56
6/27/2022	CYP	81.1	4.8	93.1	6.69
7/5/2022	CYP	81.9	5.1	102.5	6.79
7/11/2022	CYP	83.6	6.0	115.6	7.05
7/18/2022	CYP	79.9	6.3	119.4	6.90
7/25/2022	CYP	85.8	6.2	132.4	7.16
8/1/2022	CYP	77.8	4.7	71.9	6.90
8/8/2022	CYP	83.7	6.4	149.7	7.23
8/15/2022	CYP	74.8	5.5	134.1	7.17
8/22/2022	CYP	75.5	6.1	185.6	7.36
8/29/2022	CYP	78.4	6.2	176.1	7.49
9/6/2022	CYP	73.9	6.4	193.6	7.38
9/12/2022	CYP	69.4	6.4	181.2	7.21
9/19/2022	CYP	72.4	6.5	196.3	7.34

In-Situ Data
(Daily Average)

Water Quality Monitoring
Lake Conway Point Removed
HUC 11110203 PJT# 19-900
Equilibrium, 5019441765

Station ID EF1
Stream Name EAST FORK POINT REMOVE CREEK
Site Location CONWAY COUNTY, HWY 124 BRIDGE CROSSING
8 digit HUC 11110203
Lat 35°23'47.04"N
Long 92°39'32.79"W

Sample Date	Site	Temperature (°F)	Dissolved Oxygen (mg/L)	Specific Conductance (uS/cm)	pH (S.U.)
11/12/2019	EF1	43.1	11.5	101.8	7.5
12/10/2019	EF1	48.4	11.5	39.3	6.5
12/17/2019	EF1	44.8	12.9	41.0	6.6
12/31/2019	EF1	45.5	12.7	40.8	6.7
1/14/2020	EF1	48.3	12.0	34.8	6.4
1/21/2020	EF1	41.7	12.5	99.6	4.7
1/28/2020	EF1	45.1	12.7	37.5	6.6
2/4/2020	EF1	47.9	11.0	99.6	4.7
2/11/2020	EF1	44.6	12.1	89.9	4.8
2/18/2020	EF1	48.6	12.0	35.8	6.8
2/25/2020	EF1	46.1	11.8	97.5	4.9
3/3/2020	EF1	49.8	11.4	101.6	4.9
3/10/2020	EF1	55.7	12.0	40.2	7.4
3/17/2020	EF1	48.1	11.4	94.5	6.2
3/24/2020	EF1	54.1	10.6	37.2	7.0
3/31/2020	EF1	51.4	10.8	88.0	6.3
4/7/2020	EF1	61.8	10.3	37.5	7.3
4/13/2020	EF1	53.7		92.3	6.4
4/21/2020	EF1	61.4	10.3	40.2	7.0
4/28/2020	EF1	55.8	10.2	95.5	6.4
5/5/2020	EF1	66.4	9.1	39.7	7.1
5/12/2020	EF1	53.9	9.9	94.4	6.5
5/19/2020	EF1	64.7	9.2	34.7	7.2
6/2/2020	EF1	69.7	8.8	38.7	7.1
6/9/2020	EF1	66.4	8.6	90.7	6.7
6/16/2020	EF1	75.3	7.6	42.3	7.2
6/22/2020	EF1	75.6	7.4	45.9	7.2
6/30/2020	EF1	76.1	7.1	49.0	7.2
7/6/2020	EF1	79.1	7.6	43.8	7.6
7/13/2020	EF1	71.2	8.0	94.3	7.3
7/20/2020	EF1	82.0	6.8	52.6	7.2
8/3/2020	EF1	77.0	6.7	55.8	7.2
8/10/2020	EF1	71.7	6.5	101.6	7.4
8/17/2020	EF1	77.8	7.1	52.0	7.5
8/24/2020	EF1	68.9	6.9	96.1	7.5
8/31/2020	EF1	68.5	7.4	86.0	7.2
9/6/2020	EF1	76.9	8.2	43.3	7.5
9/14/2020	EF1	75.6	8.2	46.8	7.6
9/21/2020	EF1	61.1	8.5	89.4	6.9
10/5/2020	EF1	53.9	9.1	93.5	7.1
10/12/2020	EF1	70.7	7.0	55.4	7.3
10/19/2020	EF1	56.3	7.2	99.5	7.2
10/26/2020	EF1	54.7	6.5	63.7	7.3
11/10/2020	EF1	58.2	8.4	103.4	6.7

In-Situ Data
(Daily Average)

Water Quality Monitoring
Lake Conway Point Removed
HUC 11110203 PJT# 19-900
Equilibrium, 5019441765

Sample Date	Site	Temperature (°F)	Dissolved Oxygen (mg/L)	Specific Conductance (uS/cm)	pH (S.U.)
11/17/2020	EF1	47.3	9.7	54.9	7.0
11/21/2020	EF1	51.7	9.5	100.4	6.5
12/8/2020	EF1	41.3	11.9	97.4	6.9
12/28/2020	EF1	37.3	12.8	126.3	7.7
1/12/2021	EF1	35.5	13.3	119.3	8.0
1/26/2021	EF1	44.6	11.1	81.6	11.2
2/2/2021	EF1	41.8	12.2	86.6	6.2
2/9/2021	EF1	42.6	12.8	42.7	6.8
2/23/2021	EF1	43.8	13.2	43.2	6.7
3/2/2021	EF1	44.9	11.9	38.2	6.5
3/8/2021	EF1	52.7	11.7	39.4	6.7
3/16/2021	EF1	53.3	10.8	41.1	6.7
3/23/2021	EF1	55.1	9.9	39.5	6.8
3/30/2021	EF1	55.1	10.9	39.0	6.8
4/6/2021	EF1	59.9	9.7	41.1	6.8
4/13/2021	EF1	63.1	9.7	41.5	6.9
4/20/2021	EF1	57.3	10.1	42.1	6.9
4/27/2021	EF1	64.4	9.9	38.5	7.0
5/4/2021	EF1	64.1	9.0	37.2	6.5
5/11/2021	EF1	61.9	9.8	38.9	6.8
5/18/2021	EF1	65.7	8.8	40.2	6.6
5/25/2021	EF1	67.4	9.0	39.9	6.7
6/1/2021	EF1	65.5	8.8	38.5	6.7
6/8/2021	EF1	68.0	8.7	37.3	6.6
6/15/2021	EF1	72.4	8.2	40.1	6.7
6/22/2021	EF1	74.0	7.8	45.3	6.7
6/29/2021	EF1	79.2	7.1	46.3	7.0
7/6/2021	EF1	76.9	7.3	37.6	9.2
7/13/2021	EF1	75.5	7.3	49.5	7.0
7/20/2021	EF1	75.7	7.7	41.8	11.1
7/27/2021	EF1	81.4	6.8	48.2	6.8
8/3/2021	EF1	77.4	6.2	51.1	11.1
8/10/2021	EF1	78.8	5.4	54.5	6.7
8/17/2021	EF1	79.4	5.7	55.8	6.7
8/24/2021	EF1	81.7	4.2	70.6	6.8
8/31/2021	EF1	77.5	3.4	67.4	6.7
9/7/2021	EF1	75.5	4.0	70.2	6.7
9/14/2021	EF1	77.2	4.7	73.0	6.7
9/21/2021	EF1	74.5	4.5	59.8	7.3
9/28/2021	EF1	65.7	5.0	58.7	7.3
10/5/2021	EF1	68.3	5.4	47.2	6.6
10/12/2021	EF1	65.4	5.2	50.2	7.0
10/19/2021	EF1	55.3	6.8	50.7	6.8
10/26/2021	EF1	59.1	5.9	48.9	7.5
11/2/2021	EF1	52.2	7.7	48.1	6.6
11/9/2021	EF1	47.2	8.9	46.8	8.1

In-Situ Data
(Daily Average)

Water Quality Monitoring
Lake Conway Point Removed
HUC 11110203 PJT# 19-900
Equilibrium, 5019441765

Sample Date	Site	Temperature (°F)	Dissolved Oxygen (mg/L)	Specific Conductance (uS/cm)	pH (S.U.)
11/16/2021	EF1	51.2	8.1	44.5	6.5
11/30/2021	EF1	42.2	8.6	48.1	6.7
12/7/2021	EF1	45.4	7.1	51.2	1.3
12/14/2021	EF1	46.3	9.7	44.7	6.7
12/19/2021	EF1	48.3	11.1	35.8	5.2
12/26/2021	EF1	52.8	10.1	38.2	6.7
1/4/2022	EF1	48.4	11.7	28.1	6.5
1/11/2022	EF1	43.6	12.6	29.8	6.4
1/18/2022	EF1	43.3	12.4	30.7	6.6
1/25/2022	EF1	43.3	13.2	29.6	6.7
2/1/2022	EF1	44.3	12.2	31.3	6.6
2/8/2022	EF1	43.7	13.6	29.4	6.7
2/15/2022	EF1	45.8	12.5	32.2	6.7
2/21/2022	EF1	48.4	11.8	28.6	6.6
2/28/2022	EF1	46.7	12.8	26.7	6.0
3/7/2022	EF1	51.1	11.5	25.3	6.5
3/14/2022	EF1	47.2	12.2	26.0	6.6
3/21/2022	EF1	53.5	11.1	29.3	6.5
3/28/2022	EF1	53.8	11.5	25.5	6.4
4/4/2022	EF1	55.9	10.3	27.5	6.6
4/11/2022	EF1	58.4	9.7	27.1	6.3
4/18/2022	EF1	56.8	10.7	36.6	6.7
4/25/2022	EF1	61.6	9.6	35.1	6.0
5/2/2022	EF1	62.2	9.0	37.8	6.4
5/9/2022	EF1	64.6	9.3	36.2	6.2
5/16/2022	EF1	70.7	8.5	41.9	6.5
5/23/2022	EF1	66.2	9.4	40.1	6.4
6/6/2022	EF1	70.7	7.5	42.8	6.2
6/13/2022	EF1	78.6	7.2	46.0	6.4
6/20/2022	EF1	76.3	7.1	50.6	6.4
6/27/2022	EF1	77.4	6.3	58.5	6.5
7/5/2022	EF1	81.9	5.7	63.5	6.4
7/11/2022	EF1	79.3	5.0	72.4	6.5
7/18/2022	EF1	79.6	4.5	66.6	6.3
7/25/2022	EF1	80.9	4.4	84.9	6.6
8/1/2022	EF1	77.6	4.1	70.3	6.4
8/8/2022	EF1	80.5	3.6	84.5	6.6
8/15/2022	EF1	75.7	4.6	72.9	6.4
8/22/2022	EF1	75.7	6.6	60.5	6.6
8/29/2022	EF1	78.1	5.7	54.4	6.4
9/6/2022	EF1	74.8	5.8	64.6	6.6
9/12/2022	EF1	68.5	5.3	59.0	6.5
9/19/2022	EF1	72.13	6.1	69.5	6.6

In-Situ Data
(Daily Average)

Water Quality Monitoring
Lake Conway Point Removed
HUC 11110203 PJT# 19-900
Equilibrium, 5019441765

Station ID **EF2**
Stream Name **EAST FORK POINT REMOVE CREEK**
Site Location **CONWAY COUNTY, HWY 95 BRIDGE CROSSING**
8 digit HUC **11110203**
Lat **35°15'48.52"N**
Long **92°43'57.27"W**

Sample Date	Site	Temperature (°F)	Dissolved Oxygen (mg/L)	Specific Conductance (uS/cm)	pH (S.U.)
11/12/2019	EF2	44.6	11.1	106.0	7.2
12/10/2019	EF2	49.3	11.0	45.4	6.4
12/17/2019	EF2	44.7	12.0	48.1	6.5
12/31/2019	EF2	46.3	11.8	47.9	6.6
1/14/2020	EF2	49.0	11.6	43.0	6.4
1/21/2020	EF2	41.0	12.3	103.9	4.5
1/28/2020	EF2	45.9	12.1	42.1	6.5
2/4/2020	EF2	47.5	11.0	103.9	4.5
2/11/2020	EF2	46.0	11.4	103.3	4.8
2/18/2020	EF2	49.6	11.7	41.5	6.7
2/25/2020	EF2	47.0	11.1	101.4	4.7
3/3/2020	EF2	50.1	10.6	105.7	4.7
3/10/2020	EF2	55.8	11.5	46.9	7.3
3/17/2020	EF2	48.3	11.2	98.9	6.2
3/24/2020	EF2	55.1	10.2	42.5	6.8
3/31/2020	EF2	51.9	10.4	91.2	6.8
4/7/2020	EF2	61.1	9.3	40.7	6.9
4/13/2020	EF2	53.9		99.9	6.8
4/21/2020	EF2	60.3	9.4	44.5	6.8
4/28/2020	EF2	55.8	9.7	98.5	6.2
5/5/2020	EF2	66.8	8.3	42.7	6.9
5/12/2020	EF2	55.2	9.4	98.6	6.6
5/19/2020	EF2	65.3	8.7	42.6	6.8
6/2/2020	EF2	69.0	8.2	41.3	6.8
6/9/2020	EF2	67.9	8.0	93.6	6.6
6/16/2020	EF2	75.6	7.0	46.1	6.9
6/22/2020	EF2	75.2	6.3	49.6	6.9
6/30/2020	EF2	77.3	5.3	56.6	7.0
7/6/2020	EF2	78.4	7.0	50.0	7.3
7/13/2020	EF2	72.5	5.6	119.8	8.0
7/20/2020	EF2	86.3	3.4	62.6	6.8
8/3/2020	EF2	79.8	4.4	58.7	6.8
8/10/2020	EF2	74.6	3.2	108.3	7.0
8/17/2020	EF2	80.3	5.1	57.2	7.2
8/24/2020	EF2	71.4	2.9	107.4	7.0
8/31/2020	EF2	68.8	6.8	97.8	7.0
9/6/2020	EF2	75.8	7.8	48.1	7.3
9/14/2020	EF2	75.3	7.0	52.4	7.1
9/21/2020	EF2	63.1	7.8	94.9	6.8
10/5/2020	EF2	56.7	8.6	98.8	6.8
10/12/2020	EF2	69.2	6.2	64.5	7.0
10/19/2020	EF2	56.8	6.2	109.5	6.6
10/26/2020	EF2	55.9	3.2	78.9	6.9
11/10/2020	EF2	57.1	8.8	112.3	6.5

In-Situ Data
(Daily Average)

Water Quality Monitoring
Lake Conway Point Removed
HUC 11110203 PJT# 19-900
Equilibrium, 5019441765

Sample Date	Site	Temperature (°F)	Dissolved Oxygen (mg/L)	Specific Conductance (uS/cm)	pH (S.U.)
11/17/2020	EF2	50.9	9.3	68.1	6.7
11/21/2020	EF2	51.9	9.8	112.2	6.1
12/8/2020	EF2	41.7	11.6	105.6	6.5
12/28/2020	EF2	37.4	12.4	135.0	7.5
1/12/2021	EF2	35.5	13.0	125.4	7.6
1/26/2021	EF2	45.1	10.8	88.4	10.5
2/2/2021	EF2	42.7	11.9	92.0	5.2
2/9/2021	EF2	42.3	12.4	50.3	6.7
2/23/2021	EF2	39.3	13.8	54.2	6.7
3/2/2021	EF2	46.0	11.6	45.2	6.4
3/8/2021	EF2	50.7	11.8	46.1	6.7
3/16/2021	EF2	55.8	9.9	50.0	6.7
3/23/2021	EF2	57.0	9.9	46.3	7.0
3/30/2021	EF2	55.8	10.3	44.2	6.6
4/6/2021	EF2	63.0	10.0	46.6	7.3
4/13/2021	EF2	63.4	8.3	49.2	6.8
4/20/2021	EF2	58.0	9.3	48.5	6.8
4/27/2021	EF2	64.1	9.4	45.0	6.8
5/4/2021	EF2	64.9	8.6	39.8	6.3
5/11/2021	EF2	61.8	8.9	45.3	6.5
5/18/2021	EF2	65.8	8.6	49.4	6.5
5/25/2021	EF2	68.3	8.3	43.8	6.4
6/1/2021	EF2	66.5	8.3	44.9	7.9
6/8/2021	EF2	68.7	8.3	42.0	6.5
6/15/2021	EF2	74.1	7.5	42.1	6.5
6/22/2021	EF2	73.6	7.2	48.1	6.5
6/29/2021	EF2	78.5	6.1	53.0	7.7
7/6/2021	EF2	80.5	5.4	58.9	9.6
7/13/2021	EF2	78.1	5.5	57.9	6.5
7/20/2021	EF2	76.4	7.2	45.4	11.1
7/27/2021	EF2	83.4	5.0	50.6	6.4
8/3/2021	EF2	79.0	3.4	59.3	10.0
8/10/2021	EF2	79.6	2.2	73.5	7.9
8/17/2021	EF2	80.9	5.0	70.1	6.6
8/24/2021	EF2	83.8	2.1	83.5	6.4
8/31/2021	EF2	81.0	2.6	81.9	6.5
9/7/2021	EF2	78.2	7.4	79.0	6.8
9/14/2021	EF2	80.4	10.7	73.9	7.0
9/21/2021	EF2	75.2	3.2	81.8	7.1
9/28/2021	EF2	67.5	2.5	77.0	8.8
10/5/2021	EF2	70.6	2.1	79.2	6.5
10/12/2021	EF2	67.8	2.3	60.6	6.6
10/18/2021	EF2	59.5	9.0	101.6	8.2
10/19/2021	EF2	59.1	3.2	65.1	6.5
10/26/2021	EF2	61.4	2.4	66.1	7.2
11/2/2021	EF2	53.0	5.5	53.2	6.5
11/9/2021	EF2	48.7	6.2	53.8	7.6
11/10/2021	EF2	51.9	10.1	103.0	9.4

In-Situ Data
(Daily Average)

Water Quality Monitoring
Lake Conway Point Removed
HUC 11110203 PJT# 19-900
Equilibrium, 5019441765

Sample Date	Site	Temperature (°F)	Dissolved Oxygen (mg/L)	Specific Conductance (uS/cm)	pH (S.U.)
11/16/2021	EF2	51.8	7.1	51.4	6.5
11/30/2021	EF2	44.3	7.7	52.8	6.6
12/7/2021	EF2	48.4	5.1	53.1	-0.6
12/14/2021	EF2	46.2	7.8	53.0	6.6
12/19/2021	EF2	48.9	10.6	39.4	6.3
12/26/2021	EF2	52.7	9.9	42.7	6.7
1/4/2022	EF2	46.9	11.8	32.6	6.5
1/11/2022	EF2	42.8	12.5	35.2	6.2
1/18/2022	EF2	42.7	12.4	35.9	6.5
1/25/2022	EF2	41.0	12.8	36.2	6.5
2/1/2022	EF2	42.6	12.3	38.4	6.5
2/8/2022	EF2	40.8	13.7	36.6	6.6
2/15/2022	EF2	43.4	12.5	36.2	6.6
2/21/2022	EF2	47.3	11.8	33.4	6.5
2/28/2022	EF2	45.9	12.7	31.6	6.1
3/7/2022	EF2	53.1	11.0	31.5	6.6
3/14/2022	EF2	47.0	11.9	30.2	6.5
3/21/2022	EF2	54.5	10.4	33.3	6.2
3/28/2022	EF2	53.3	11.2	28.3	6.3
4/4/2022	EF2	56.3	10.0	31.3	6.4
4/11/2022	EF2	58.7	9.4	30.8	6.2
4/18/2022	EF2	56.5	10.1	41.0	6.4
4/25/2022	EF2	63.2	9.0	40.5	6.0
5/2/2022	EF2	63.3	8.7	41.7	6.4
5/9/2022	EF2	64.9	8.8	39.7	6.1
5/16/2022	EF2	70.2	7.6	52.6	6.5
5/23/2022	EF2	67.1	8.3	43.3	6.2
6/6/2022	EF2	72.6	6.8	50.5	6.1
6/13/2022	EF2	79.2	6.7	54.7	6.3
6/20/2022	EF2	81.3	5.6	60.7	6.2
6/27/2022	EF2	80.2	4.9	63.8	6.3
7/5/2022	EF2	84.3	3.8	84.3	6.2
7/11/2022	EF2	82.3	5.2	99.9	6.4
7/18/2022	EF2	82.4	2.5	98.4	6.3
7/25/2022	EF2	82.7	6.7	105.0	6.5
8/1/2022	EF2	79.6	2.5	127.2	6.4
8/8/2022	EF2	81.9	7.8	119.5	6.6
8/15/2022	EF2	78.2	3.0	118.3	6.3
8/22/2022	EF2	76.1	2.6	114.4	6.4
8/29/2022	EF2	80.9	2.6	78.3	6.1
9/6/2022	EF2	77.10	3.6	102.8	6.5
9/12/2022	EF2	71.79	2.67	94.44	6.35
9/19/2022	EF2	75.63	8.15	95.89	6.67

In-Situ Data
(Daily Average)

Water Quality Monitoring
Lake Conway Point Removed
HUC 11110203 PJT# 19-900
Equilibrium, 5019441765

Station ID GL
Stream Name Gum Log Creek
Site Location POPE COUNTY, AT AR HWY 247 BRIDGE CROSSING
8 digit HUC 11110203
Lat 35°17'12.45"N
Long 92°54'41.00"W

Sample Date	Site	Temperature (°F)	Dissolved Oxygen (mg/L)	Specific Conductance (uS/cm)	pH (S.U.)
11/12/2019	GL	43.6	11.1	132.3	7.7
12/10/2019	GL	49.9	10.7	67.0	6.5
12/17/2019	GL	45.9	12.4	11.3	6.6
12/31/2019	GL	45.3	11.7	69.3	6.7
1/14/2020	GL	46.2	11.8	57.8	6.5
1/21/2020	GL	39.4	12.5	125.5	4.9
1/28/2020	GL	46.4	11.8	60.8	6.8
2/4/2020	GL	49.1	10.5	123.2	4.8
2/11/2020	GL	46.4	11.0	118.7	4.9
2/18/2020	GL	51.5	11.0	55.6	6.9
2/25/2020	GL	47.2	10.8	117.4	4.8
3/3/2020	GL	50.8	10.2	123.4	5.1
3/10/2020	GL	53.8	10.7	68.0	7.2
3/17/2020	GL	48.1	11.0	112.3	6.3
3/24/2020	GL	54.7	10.2	46.9	7.0
3/31/2020	GL	51.0	9.5	96.3	6.2
4/7/2020	GL	61.5	9.1	60.7	7.1
4/13/2020	GL	52.0		104.1	6.4
4/21/2020	GL	59.4	9.4	60.8	7.2
4/28/2020	GL	55.3	9.6	112.1	6.3
5/5/2020	GL	66.0	8.2	64.2	6.9
5/12/2020	GL	53.0	9.7	119.7	6.6
5/19/2020	GL	62.9	8.9	55.5	7.4
6/2/2020	GL	67.8	8.0	72.7	7.2
6/9/2020	GL	66.8	7.9	123.8	6.7
6/16/2020	GL	74.0	6.6	87.1	7.2
6/22/2020	GL	73.5	6.1	87.6	7.4
6/30/2020	GL	76.0	4.8	92.6	7.4
7/6/2020	GL	77.1	4.9	87.9	7.5
7/13/2020	GL	70.9	5.3	133.0	7.2
7/20/2020	GL	82.4	4.6	109.8	7.3
8/3/2020	GL	77.1	4.7	113.3	7.2
8/10/2020	GL	71.1	4.7	162.6	7.8
8/17/2020	GL	78.0	4.7	120.0	7.6
8/24/2020	GL	68.2	4.1	168.3	7.5
8/31/2020	GL	68.4	4.7	135.4	7.1
9/6/2020	GL	75.5	7.8	88.0	7.5
9/14/2020	GL	73.1	7.5	100.3	7.5
9/21/2020	GL	61.3	8.0	140.0	7.0
10/5/2020	GL	55.3	8.2	138.6	7.1
10/12/2020	GL	68.6	5.8	109.5	7.3
10/19/2020	GL	56.7	5.7	144.2	7.2
10/26/2020	GL	56.0	4.7	101.4	7.8
11/10/2020	GL	57.1	6.9	156.6	6.7

In-Situ Data
(Daily Average)

Water Quality Monitoring
Lake Conway Point Removed
HUC 11110203 PJT# 19-900
Equilibrium, 5019441765

Sample Date	Site	Temperature (°F)	Dissolved Oxygen (mg/L)	Specific Conductance (uS/cm)	pH (S.U.)
11/17/2020	GL	50.5	7.2	106.3	7.2
11/21/2020	GL	51.4	7.9	146.2	6.5
12/8/2020	GL	43.4	11.0	134.2	7.0
12/28/2020	GL	38.4	11.9	158.9	7.8
1/12/2021	GL	36.0	12.8	138.9	7.5
1/26/2021	GL	46.9	10.4	97.4	10.8
2/2/2021	GL	42.2	11.8	111.1	5.0
2/9/2021	GL	42.2	12.1	76.4	7.0
2/23/2021	GL	42.6	12.6	71.9	6.7
3/2/2021	GL	44.8	11.6	53.7	6.6
3/8/2021	GL	50.5	11.4	67.8	6.8
3/16/2021	GL	54.4	9.6	68.0	6.6
3/23/2021	GL	55.0	9.4	58.8	6.7
3/30/2021	GL	54.6	9.9	62.1	6.9
4/6/2021	GL	59.4	8.7	71.2	6.9
4/13/2021	GL	61.5	8.5	73.1	7.0
4/20/2021	GL	56.7	9.6	69.7	6.6
4/27/2021	GL	62.1	9.0	61.6	6.9
5/4/2021	GL	64.6	8.1	49.3	6.5
5/11/2021	GL	60.0	9.2	69.5	6.8
5/18/2021	GL	65.3	8.2	66.9	6.6
5/25/2021	GL	67.4	8.3	60.6	6.6
6/1/2021	GL	64.2	8.7	56.9	6.7
6/8/2021	GL	68.8	8.2	59.0	6.7
6/15/2021	GL	74.2	7.3	75.4	6.8
6/22/2021	GL	71.1	7.1	89.8	6.9
6/29/2021	GL	77.6	5.9	93.2	7.4
7/6/2021	GL	75.6	6.2	103.8	9.7
7/13/2021	GL	76.1	5.5	100.8	7.2
7/20/2021	GL	75.0	5.5	88.7	10.7
7/27/2021	GL	81.1	4.6	124.6	6.9
8/3/2021	GL	75.9	3.9	135.8	10.0
8/10/2021	GL	76.9	3.4	121.9	7.0
8/17/2021	GL	77.7	3.3	116.7	6.7
8/24/2021	GL	79.2	2.2	127.8	7.0
8/31/2021	GL	77.6	2.8	128.4	6.7
9/7/2021	GL	74.0	2.8	126.4	6.8
9/14/2021	GL	78.1	3.2	143.1	6.7
9/21/2021	GL	73.5	4.3	101.9	7.5
9/28/2021	GL	64.6	3.7	97.2	7.4
10/5/2021	GL	66.1	2.5	109.3	6.7
10/12/2021	GL	64.2	3.1	109.0	7.2
10/19/2021	GL	55.9	3.3	117.5	6.6
10/26/2021	GL	59.6	2.9	108.9	7.6
11/2/2021	GL	52.6	3.6	96.6	6.7
11/9/2021	GL	48.8	4.6	87.6	7.9
11/16/2021	GL	52.4	3.9	82.0	6.6
11/30/2021	GL	43.7	3.5	81.0	6.5
12/7/2021	GL	45.8	2.8	84.2	0.3
12/14/2021	GL	47.5	2.9	78.3	6.8
12/19/2021	GL	47.7	9.3	111.8	3.4
12/26/2021	GL	53.3	8.2	83.0	6.5
1/4/2022	GL	43.6	12.3	65.8	6.4
1/11/2022	GL	42.0	12.4	58.0	6.4

In-Situ Data
(Daily Average)

Water Quality Monitoring
Lake Conway Point Removed
HUC 11110203 PJT# 19-900
Equilibrium, 5019441765

Sample Date	Site	Temperature (°F)	Dissolved Oxygen (mg/L)	Specific Conductance (uS/cm)	pH (S.U.)
1/18/2022	GL	41.7	12.5	56.6	6.6
1/25/2022	GL	42.8	12.3	63.5	6.8
2/1/2022	GL	43.9	11.8	66.0	6.6
2/8/2022	GL	42.3	13.2	58.9	6.5
2/15/2022	GL	44.5	12.2	61.4	6.7
2/21/2022	GL	47.1	11.4	55.0	6.6
2/28/2022	GL	46.7	12.2	41.3	6.2
3/7/2022	GL	52.5	10.8	54.2	6.5
3/14/2022	GL	46.1	11.6	48.8	6.6
3/21/2022	GL	54.2	10.7	54.2	6.5
3/28/2022	GL	52.6	11.3	46.8	6.5
4/4/2022	GL	55.7	9.9	47.4	6.6
4/11/2022	GL	59.1	8.8	46.7	6.3
4/18/2022	GL	56.2	10.3	60.6	6.4
4/25/2022	GL	62.4	8.6	49.8	6.1
5/2/2022	GL	61.3	8.9	60.9	6.4
5/9/2022	GL	64.8	8.6	58.3	6.3
5/16/2022	GL	68.0	8.2	56.9	6.4
5/23/2022	GL	64.9	8.4	77.8	6.5
6/6/2022	GL	68.9	6.8	100.4	6.5
6/13/2022	GL	75.4	6.9	79.7	6.4
6/20/2022	GL	75.5	6.0	95.7	6.6
6/27/2022	GL	77.7	5.4	101.3	6.5
7/5/2022	GL	80.8	4.3	107.8	6.6
7/11/2022	GL	81.0	4.9	116.8	6.6
7/18/2022	GL	77.5	3.6	98.7	6.3
7/25/2022	GL	82.6	4.1	133.9	6.7
8/1/2022	GL	75.9	4.1	78.8	6.4
8/8/2022	GL	79.4	3.6	109.6	6.6
8/15/2022	GL	73.0	2.5	110.7	6.4
8/22/2022	GL	74.0	3.3	112.3	6.6
8/29/2022	GL	76.4	2.2	113.4	6.5
9/6/2022	GL	74.5	4.9	116.3	6.7
9/12/2022	GL	67.7	3.9	74.0	6.5
9/19/2022	GL	72.43	3.5	92.1	6.5

In-Situ Data
(Daily Average)

Water Quality Monitoring
Lake Conway Point Removed
HUC 11110203 PJT# 19-900
Equilibrium, 5019441765

Station ID LCC
Stream Name Hackers Creek
Site Location POPE COUNTY, AT GRIFFEN FLAT RD BRIDGE CROSSING
8 digit HUC 11110203
Lat 35°19'48.34"N
Long 92°52'9.55"W

Sample Date	Site	Temperature (°F)	Dissolved Oxygen (mg/L)	Specific Conductance (uS/cm)	pH (S.U.)
11/12/2019	LCC	44.2	11.4	108.0	7.7
12/10/2019	LCC	49.0	11.2	45.2	6.5
12/17/2019	LCC	44.4	12.5	48.0	6.6
12/31/2019	LCC	45.0	12.4	46.1	6.7
1/14/2020	LCC	47.9	11.9	37.2	6.5
1/21/2020	LCC	40.8	12.6	106.0	4.8
1/28/2020	LCC	45.8	12.4	43.6	6.7
2/4/2020	LCC	48.2	10.9	104.7	4.7
2/11/2020	LCC	45.7	11.5	101.7	4.9
2/18/2020	LCC	49.8	11.7	41.6	6.8
2/25/2020	LCC	46.9	11.4	101.9	4.9
3/3/2020	LCC	49.3	10.9	103.9	4.9
3/17/2020	LCC	48.4	11.3	98.7	6.3
3/24/2020	LCC	54.6	10.2	39.9	6.9
3/31/2020	LCC	51.5	10.7	89.7	6.3
4/7/2020	LCC	61.3	9.6	44.0	7.1
4/13/2020	LCC	53.2		92.7	6.3
4/21/2020	LCC	59.7	9.7	43.2	7.0
4/28/2020	LCC	56.0	9.8	98.5	6.3
5/5/2020	LCC	65.9	8.6	45.6	7.0
5/12/2020	LCC	54.7	9.8	100.3	6.4
5/19/2020	LCC	64.1	9.1	43.4	7.2
6/2/2020	LCC	70.3	8.3	48.8	7.2
6/9/2020	LCC	68.6	7.7	101.7	6.7
6/16/2020	LCC	76.4	6.9	57.3	7.0
6/22/2020	LCC	75.9	6.5	64.1	7.2
6/30/2020	LCC	76.6	5.7	69.8	7.2
7/6/2020	LCC	78.4	6.5	66.2	7.5
7/13/2020	LCC	72.3	6.1	111.2	7.1
7/20/2020	LCC	82.1	5.4	72.2	7.2
8/3/2020	LCC	76.8	6.0	68.9	7.2
8/10/2020	LCC	71.5	5.9	112.2	7.7
8/17/2020	LCC	79.0	5.9	65.0	7.7
8/24/2020	LCC	68.8	6.2	107.6	7.6
8/31/2020	LCC	69.2	5.2	106.6	7.1
9/6/2020	LCC	76.9	8.2	44.3	7.6
9/14/2020	LCC	75.3	7.9	55.2	7.5
9/21/2020	LCC	62.5	8.3	99.3	7.1
10/5/2020	LCC	55.9	8.9	101.7	7.1
10/12/2020	LCC	69.3	6.8	85.5	7.6
10/19/2020	LCC	57.0	7.7	108.1	7.2
10/26/2020	LCC	56.6	6.4	72.1	7.5
11/10/2020	LCC	57.8	8.4	108.0	6.6

In-Situ Data
(Daily Average)

Water Quality Monitoring
Lake Conway Point Removed
HUC 11110203 PJT# 19-900
Equilibrium, 5019441765

Sample Date	Site	Temperature (°F)	Dissolved Oxygen (mg/L)	Specific Conductance (uS/cm)	pH (S.U.)
11/17/2020	LCC	49.5	9.2	64.2	7.1
11/21/2020	LCC	52.3	9.6	109.2	6.4
12/1/2020	LCC	42.0	12.2	91.1	7.7
12/8/2020	LCC	43.0	11.7	104.0	7.0
12/28/2020	LCC	37.1	12.8	130.0	7.6
1/12/2021	LCC	36.3	13.0	119.8	7.7
1/26/2021	LCC	46.2	10.8	82.6	10.8
2/2/2021	LCC	42.3	12.0	91.1	5.0
2/9/2021	LCC	42.8	12.6	51.2	7.0
2/23/2021	LCC	42.5	13.3	52.2	6.8
3/2/2021	LCC	45.1	12.0	44.7	6.7
3/8/2021	LCC	50.9	12.4	47.1	6.9
3/16/2021	LCC	54.9	10.2	46.5	6.7
3/23/2021	LCC	55.1	9.8	42.8	6.7
3/30/2021	LCC	55.8	10.6	45.7	6.8
4/6/2021	LCC	59.6	9.1	48.0	6.8
4/13/2021	LCC	61.5	9.4	47.6	6.9
4/20/2021	LCC	57.6	10.3	46.3	6.8
4/27/2021	LCC	63.5	9.7	44.9	6.9
5/4/2021	LCC	64.2	8.9	40.8	6.6
5/11/2021	LCC	61.7	9.3	46.1	6.7
5/18/2021	LCC	65.7	8.7	46.6	6.6
5/25/2021	LCC	65.7	8.9	37.8	6.5
6/1/2021	LCC	66.3	8.7	41.2	6.6
6/8/2021	LCC	68.9	8.6	45.2	6.6
6/15/2021	LCC	75.9	7.3	50.2	6.6
6/22/2021	LCC	73.0	7.3	56.6	6.7
6/29/2021	LCC	79.3	6.5	63.9	7.1
7/6/2021	LCC	76.6	6.7	65.5	8.4
7/13/2021	LCC	77.1	6.4	66.8	6.8
7/20/2021	LCC	76.7	6.7	65.0	10.6
7/27/2021	LCC	83.1	5.9	67.1	6.7
8/3/2021	LCC	77.9	5.5	74.7	10.1
8/10/2021	LCC	78.9	5.6	73.9	6.9
8/17/2021	LCC	77.5	5.5	67.7	6.6
8/24/2021	LCC	80.3	5.1	75.2	7.0
8/31/2021	LCC	76.4	4.6	67.9	6.6
9/7/2021	LCC	73.2	4.5	69.7	6.6
9/14/2021	LCC	75.5	5.9	69.6	6.7
9/21/2021	LCC	73.9	5.3	58.9	7.5
9/28/2021	LCC	64.8	5.1	55.2	7.3
10/5/2021	LCC	66.5	4.5	57.7	6.5
10/12/2021	LCC	64.0	4.3	54.6	7.0
10/19/2021	LCC	55.3	6.7	54.0	6.7
10/26/2021	LCC	58.6	5.5	50.2	7.5
11/2/2021	LCC	53.1	7.2	47.3	6.7
11/9/2021	LCC	47.5	8.7	49.2	8.0

In-Situ Data
(Daily Average)

Water Quality Monitoring
Lake Conway Point Removed
HUC 11110203 PJT# 19-900
Equilibrium, 5019441765

Sample Date	Site	Temperature (°F)	Dissolved Oxygen (mg/L)	Specific Conductance (uS/cm)	pH (S.U.)
11/16/2021	LCC	51.2	7.9	48.9	6.7
11/30/2021	LCC	42.3	8.0	50.5	6.5
12/7/2021	LCC	46.6	6.4	51.1	0.1
12/14/2021	LCC	46.3	8.5	50.3	6.8
12/19/2021	LCC	47.8	10.6	43.9	4.1
12/26/2021	LCC	52.6	9.8	43.4	6.8
1/4/2022	LCC	46.9	12.0	35.8	6.6
1/11/2022	LCC	42.7	12.6	35.8	6.5
1/18/2022	LCC	42.8	12.4	36.0	6.7
1/25/2022	LCC	43.0	12.9	37.2	6.8
2/1/2022	LCC	43.8	12.3	38.5	6.7
2/8/2022	LCC	43.7	13.8	35.7	6.7
2/15/2022	LCC	45.8	12.6	36.8	6.8
2/21/2022	LCC	47.6	11.9	34.4	6.7
2/28/2022	LCC	47.0	12.9	29.2	6.2
3/7/2022	LCC	51.6	11.2	17.1	6.7
3/14/2022	LCC	46.5	12.1	30.4	6.7
3/21/2022	LCC	54.2	11.2	34.0	6.6
3/28/2022	LCC	53.1	11.7	31.2	6.5
4/4/2022	LCC	56.2	10.0	32.1	6.6
4/11/2022	LCC	59.1	9.3	31.1	6.3
4/18/2022	LCC	56.9	10.7	42.7	6.6
4/25/2022	LCC	61.6	9.3	39.4	6.0
5/2/2022	LCC	62.5	8.9	42.7	6.5
5/9/2022	LCC	64.3	9.0	41.8	6.2
5/16/2022	LCC	68.7	8.5	46.2	6.5
5/23/2022	LCC	66.8	8.6	49.1	6.4
6/6/2022	LCC	72.1	7.0	54.0	6.2
6/13/2022	LCC	79.1	6.8	57.6	6.5
6/20/2022	LCC	77.7	6.6	54.0	6.4
6/27/2022	LCC	78.9	6.1	57.6	6.4
7/5/2022	LCC	80.7	5.6	69.6	6.3
7/11/2022	LCC	79.5	5.3	81.0	6.4
7/18/2022	LCC	79.2	4.9	72.6	6.2
7/25/2022	LCC	81.0	5.5	86.9	6.5
8/1/2022	LCC	77.4	5.5	62.7	6.4
8/8/2022	LCC	81.0	5.7	72.2	6.4
8/15/2022	LCC	74.8	5.0	38.3	6.3
8/22/2022	LCC	75.2	5.3	62.8	6.4
8/29/2022	LCC	78.2	5.2	54.3	6.2
9/6/2022	LCC	74.5	5.5	67.9	6.5
9/12/2022	LCC	67.5	5.6	62.1	6.4
9/19/2022	LCC	72.17	5.4	66.0	6.4

In-Situ Data
(Daily Average)

Water Quality Monitoring
Lake Conway Point Removed
HUC 11110203 PJT# 19-900
Equilibrium, 5019441765

Station ID **PR**
Stream Name **POINT REMOVE CREEK**
Site Location **CONWAY COUNTY, HWY 64 BRIDGE CROSSING**
8 digit HUC **11110203**
Lat **35°10'56.43"N**
Long **92°47'2.77"W**

Sample Date	Site	Temperature (°F)	Dissolved Oxygen (mg/L)	Specific Conductance (uS/cm)	pH (S.U.)
11/12/2019	PR	45.6	9.4	107.1	8.2
12/10/2019	PR	49.2	9.5	48.3	6.3
12/17/2019	PR	44.9	10.9	53.4	6.5
12/31/2019	PR	48.7	10.3	58.0	6.7
1/14/2020	PR	46.8	9.5	38.5	6.1
1/21/2020	PR	41.9	10.3	104.1	4.5
1/28/2020	PR	46.5	11.1	41.4	6.7
2/4/2020	PR	47.1	10.8	106.3	4.8
2/11/2020	PR	46.1	10.5	104.9	4.8
2/18/2020	PR	49.6	10.6	40.9	6.9
2/25/2020	PR	46.5	10.8	108.0	4.8
3/3/2020	PR	49.8	10.3	110.2	4.8
3/10/2020	PR	54.4	9.9	55.5	7.2
3/17/2020	PR	48.3	9.9	99.8	6.3
3/24/2020	PR	55.8	8.4	23.2	7.0
3/31/2020	PR	54.5	8.8	95.4	6.3
4/7/2020	PR	62.3	7.9	42.8	6.9
4/13/2020	PR	54.9		103.4	6.3
4/21/2020	PR	59.8	8.0	49.9	7.0
4/28/2020	PR	57.2	8.4	103.5	6.1
5/5/2020	PR	68.5	6.4	51.6	7.1
5/12/2020	PR	57.2	8.0	106.6	6.5
5/19/2020	PR	66.5	7.0	42.8	7.2
6/2/2020	PR	71.7	6.0	49.7	7.0
6/9/2020	PR	69.2	5.5	110.8	6.5
6/16/2020	PR	75.7	6.4	168.1	7.1
6/22/2020	PR	78.4	5.2	68.7	7.1
6/30/2020	PR	79.4	4.7	85.3	7.3
7/6/2020	PR	79.9	5.3	59.6	7.7
7/13/2020	PR	74.8	5.9	114.9	7.5
7/20/2020	PR	84.7	4.4	89.8	7.1
8/3/2020	PR	79.7	4.7	159.7	7.2
8/10/2020	PR	73.8	5.2	171.5	7.7
8/17/2020	PR	81.8	4.7	85.0	7.7
8/24/2020	PR	71.9	5.2	150.7	7.7
8/31/2020	PR	70.2	4.8	116.2	7.4
9/6/2020	PR	76.1	5.2	48.6	7.6
9/14/2020	PR	76.6	5.1	65.3	7.4
9/21/2020	PR	64.0	6.7	114.2	7.3
10/5/2020	PR	57.7	8.0	114.2	7.4
10/12/2020	PR	69.4	6.3	85.5	7.3
10/19/2020	PR	59.0	7.0	135.7	7.3
10/26/2020	PR	58.4	6.3	111.7	7.3
11/2/2020	PR	49.0	10.0	76.6	5.8
11/10/2020	PR	56.0	8.6	123.6	7.3

In-Situ Data
(Daily Average)

Water Quality Monitoring
Lake Conway Point Removed
HUC 11110203 PJT# 19-900
Equilibrium, 5019441765

Sample Date	Site	Temperature (°F)	Dissolved Oxygen (mg/L)	Specific Conductance (uS/cm)	pH (S.U.)
11/17/2020	PR	52.2	8.5	89.4	7.6
11/21/2020	PR	52.3	8.9	138.5	6.7
12/8/2020	PR	43.5	11.4	107.3	7.3
12/28/2020	PR	37.3	12.3	148.6	9.0
1/12/2021	PR	36.3	12.1	125.6	8.3
1/26/2021	PR	46.9	10.1	99.3	12.8
2/2/2021	PR	43.8	11.3	91.9	5.9
2/9/2021	PR	42.2	10.6	77.7	7.0
2/23/2021	PR	38.7	12.4	97.5	6.6
3/2/2021	PR	48.6	9.7	47.4	6.5
3/8/2021	PR	50.5	9.9	52.9	6.5
3/16/2021	PR	57.0	8.6	57.6	6.7
3/23/2021	PR	57.0	9.0	58.9	7.1
3/30/2021	PR	58.3	8.5	46.7	6.7
4/6/2021	PR	61.1	8.4	53.0	7.0
4/13/2021	PR	63.5	7.6	58.1	6.7
4/20/2021	PR	59.7	8.8	57.1	6.8
4/27/2021	PR	62.0	8.1	50.7	6.6
5/4/2021	PR	67.1	6.3	46.7	6.8
5/11/2021	PR	64.2	6.4	49.2	6.6
5/18/2021	PR	66.9	6.5	53.1	6.5
5/25/2021	PR	71.5	5.1	39.7	6.2
6/1/2021	PR	68.7	5.8	41.7	6.5
6/8/2021	PR	71.0	5.4	46.7	6.4
6/15/2021	PR	78.3	4.5	49.8	6.6
6/22/2021	PR	76.2	4.4	68.8	6.6
6/29/2021	PR	82.5	4.7	73.5	6.9
7/6/2021	PR	81.9	5.5	85.0	8.8
7/13/2021	PR	78.9	5.1	80.9	7.4
7/20/2021	PR	78.6	4.8	67.7	10.6
7/27/2021	PR	84.5	4.7	67.7	7.3
8/3/2021	PR	81.3	4.5	112.6	9.1
8/10/2021	PR	81.2	4.6	146.0	7.2
8/17/2021	PR	81.2	4.3	99.2	6.8
8/24/2021	PR	84.0	4.2	134.2	7.5
8/31/2021	PR	81.2	4.9	144.0	7.2
9/7/2021	PR	77.7	4.5	148.9	7.1
9/14/2021	PR	79.7	9.4	156.2	8.0
9/21/2021	PR	76.5	4.9	165.7	7.8
9/28/2021	PR	68.3	4.8	119.3	7.8
10/5/2021	PR	69.5	4.2	129.3	6.8
10/12/2021	PR	67.2	3.8	103.1	7.6
10/19/2021	PR	57.8	5.7	114.0	6.9
10/26/2021	PR	61.5	4.9	110.5	8.1
11/2/2021	PR	54.4	4.7	76.2	6.7
11/9/2021	PR	49.0	8.6	142.8	8.3

In-Situ Data
(Daily Average)

Water Quality Monitoring
Lake Conway Point Removed
HUC 11110203 PJT# 19-900
Equilibrium, 5019441765

Sample Date	Site	Temperature (°F)	Dissolved Oxygen (mg/L)	Specific Conductance (uS/cm)	pH (S.U.)
11/16/2021	PR	53.9	6.1	100.9	6.8
11/30/2021	PR	44.0	11.2	145.2	7.2
12/7/2021	PR	48.4	5.0	198.3	3.7
12/14/2021	PR	48.1	6.1	195.3	6.9
12/19/2021	PR	48.7	7.4	61.9	2.6
12/26/2021	PR	51.1	9.9	47.4	6.7
1/4/2022	PR	46.4	10.0	32.4	6.2
1/11/2022	PR	43.0	11.1	34.2	6.2
1/18/2022	PR	42.6	11.9	36.5	6.4
1/25/2022	PR	40.3	12.5	40.3	6.5
2/1/2022	PR	42.9	11.9	41.5	6.5
2/8/2022	PR	41.4	11.4	49.2	6.2
2/15/2022	PR	44.1	11.9	38.6	6.6
2/21/2022	PR	46.6	11.2	34.8	6.4
2/28/2022	PR	45.0	11.3	32.7	6.3
3/7/2022	PR	53.0	10.0	35.3	6.4
3/14/2022	PR	46.7	11.3	33.1	6.4
3/21/2022	PR	56.2	9.6	39.7	6.4
3/28/2022	PR	55.1	9.1	29.7	6.0
4/4/2022	PR	57.6	9.3	34.7	6.4
4/11/2022	PR	58.0	9.0	34.8	6.2
4/18/2022	PR	59.2	8.4	48.5	6.2
4/25/2022	PR	66.0	6.8	43.8	5.9
5/2/2022	PR	65.4	7.4	44.9	6.2
5/9/2022	PR	66.7	6.4	42.4	6.0
5/16/2022	PR	72.6	5.5	48.5	6.2
5/23/2022	PR	69.0	5.9	61.8	6.0
6/6/2022	PR	73.4	4.9	73.9	6.3
6/13/2022	PR	76.2	4.4	84.2	6.0
6/20/2022	PR	81.2	4.7	92.1	6.5
6/27/2022	PR	83.3	5.7	110.9	6.7
7/5/2022	PR	84.7	4.5	124.0	6.6
7/11/2022	PR	87.9	5.9	173.5	7.0
7/18/2022	PR	83.1	4.0	169.3	6.8
7/25/2022	PR	88.0	8.1	219.2	7.6
8/1/2022	PR	79.4	2.5	194.7	6.6
8/8/2022	PR	84.0	5.7	292.0	6.9
8/15/2022	PR	79.3	4.1	277.1	6.8
8/22/2022	PR	77.2	4.6	201.3	6.8
8/29/2022	PR	80.1	3.5	135.4	6.9
9/6/2022	PR	76.0	3.6	170.3	6.9
9/12/2022	PR	71.48	3.8	153.6	6.8
9/19/2022	PR	74.50	4.97	186.19	6.93

In-Situ Data
(Daily Average)

Water Quality Monitoring
Lake Conway Point Removed
HUC 11110203 PJT# 19-900
Equilibrium, 5019441765

Station ID **WF1**
Stream Name **WEST FORK POINT REMOVE CREEK**
Site Location **CONWAY COUNTY, PEAR TREE RD BRIDGE CROSSING**
8 digit HUC **11110203**
Lat **35°26'50.87"N**
Long **92°42'45.64"W**

Sample Date	Site	Temperature (°F)	Dissolved Oxygen (mg/L)	Specific Conductance (uS/cm)	pH (S.U.)
11/12/2019	WF1	44.9	11.6	91.0	7.5
12/10/2019	WF1	47.7	11.7	27.8	6.3
12/17/2019	WF1	46.6	12.5	5.6	6.4
12/31/2019	WF1	47.9	12.3	30.4	6.7
1/14/2020	WF1	48.7	12.1	26.8	6.4
1/21/2020	WF1	42.5	12.6	89.3	4.4
1/28/2020	WF1	45.3	12.8	26.7	6.6
2/4/2020	WF1	45.4	11.4	91.9	4.6
2/11/2020	WF1	44.4	12.0	86.4	4.6
2/18/2020	WF1	46.6	12.6	26.5	6.8
2/25/2020	WF1	45.4	11.9	89.9	4.8
3/3/2020	WF1	48.2	11.8	90.8	4.9
3/10/2020	WF1	56.0	11.8	29.3	7.4
3/17/2020	WF1	48.7	11.6	86.1	6.2
3/24/2020	WF1	56.9	10.4	3.8	6.6
3/31/2020	WF1	53.2	11.0	83.2	6.2
4/7/2020	WF1	61.2	10.4	28.0	7.4
4/13/2020	WF1	54.8		84.7	6.3
4/21/2020	WF1	60.9	10.9	28.0	7.6
4/28/2020	WF1	56.4	10.3	85.5	6.3
5/5/2020	WF1	65.4	9.1	27.7	7.0
5/12/2020	WF1	56.5	9.5	82.6	6.3
5/19/2020	WF1	66.8	9.1	27.5	7.1
6/2/2020	WF1	70.7	8.7	27.9	6.9
6/9/2020	WF1	68.8	8.1	83.0	6.5
6/16/2020	WF1	75.1	7.5	29.5	7.2
6/22/2020	WF1	74.8	6.8	32.3	7.2
6/30/2020	WF1	75.7	7.0	35.5	7.2
7/6/2020	WF1	80.0	7.4	30.4	7.6
7/13/2020	WF1	71.5	7.7	81.6	7.1
7/20/2020	WF1	81.7	7.0	35.7	7.2
8/3/2020	WF1	77.1	7.3	33.1	7.2
8/10/2020	WF1	71.9	5.3	87.7	7.2
8/17/2020	WF1	78.5	7.5	32.2	7.6
8/24/2020	WF1	68.4	5.6	81.0	7.3
8/31/2020	WF1	68.0	7.4	74.2	7.3
9/6/2020	WF1	75.2	8.1	29.8	7.5
9/14/2020	WF1	77.2	7.6	33.3	7.4
9/21/2020	WF1	62.3	8.7	72.7	6.8
10/5/2020	WF1	54.3	9.5	76.5	7.0
10/12/2020	WF1	69.1	7.3	35.6	7.4
10/19/2020	WF1	56.4	7.3	78.7	6.9
10/26/2020	WF1	53.4	7.2	41.7	7.3
11/2/2020	WF1	48.5		82.3	6.3
11/10/2020	WF1	56.0	9.5	82.8	6.5

In-Situ Data
(Daily Average)

Water Quality Monitoring
Lake Conway Point Removed
HUC 11110203 PJT# 19-900
Equilibrium, 5019441765

Sample Date	Site	Temperature (°F)	Dissolved Oxygen (mg/L)	Specific Conductance (uS/cm)	pH (S.U.)
11/17/2020	WF1	48.3	10.5	34.1	7.1
11/21/2020	WF1	52.2	9.9	81.6	6.3
12/8/2020	WF1	43.0	12.1	83.2	6.8
12/28/2020	WF1	37.1	13.1	114.4	7.6
1/12/2021	WF1	36.2	13.4	108.1	7.7
1/26/2021	WF1	44.8	11.5	71.4	10.6
2/2/2021	WF1	42.7	12.4	75.3	5.0
2/9/2021	WF1	41.9	12.9	30.0	6.8
2/23/2021	WF1	42.4	13.3	32.7	6.6
3/2/2021	WF1	45.5	12.2	32.9	6.5
3/8/2021	WF1	51.0	12.2	30.0	6.7
3/16/2021	WF1	56.3	10.8	32.1	6.6
3/23/2021	WF1	55.4	10.1	33.1	6.7
3/30/2021	WF1	57.2	10.4	29.2	6.5
4/6/2021	WF1	58.7	10.2	29.4	6.9
4/13/2021	WF1	64.3	10.0	28.6	7.0
4/20/2021	WF1	59.9	10.1	29.1	7.2
4/27/2021	WF1	62.3	9.8	30.1	6.8
5/4/2021	WF1	64.4	9.2	27.3	6.3
5/11/2021	WF1	64.2	9.4	29.4	6.3
5/18/2021	WF1	66.8	8.7	31.4	6.5
5/25/2021	WF1	66.7	9.2	27.9	6.4
6/1/2021	WF1	67.0	9.0	27.5	6.5
6/8/2021	WF1	67.8	8.8	27.9	6.4
6/15/2021	WF1	74.7	8.2	28.0	6.4
6/22/2021	WF1	77.0	7.1	33.2	6.5
6/29/2021	WF1	77.1	7.3	33.5	6.9
7/6/2021	WF1	76.3	7.2	32.9	9.0
7/13/2021	WF1	75.7	7.2	34.7	6.8
7/20/2021	WF1	74.8	7.5	33.4	11.1
7/27/2021	WF1	80.1	7.0	35.4	6.7
8/3/2021	WF1	75.2	6.8	38.3	10.7
8/10/2021	WF1	78.3	6.8	34.8	6.8
8/17/2021	WF1	78.7	7.3	33.0	6.6
8/24/2021	WF1	80.7	5.7	44.5	6.8
8/31/2021	WF1	75.7	3.2	49.9	6.5
9/7/2021	WF1	73.7	2.9	60.7	6.6
9/14/2021	WF1	76.2	3.2	65.0	6.7
9/21/2021	WF1	72.5	5.2	53.7	7.4
9/28/2021	WF1	65.8	3.1	49.3	7.1
10/5/2021	WF1	67.2	2.6	56.2	6.5
10/12/2021	WF1	64.1	3.1	54.5	6.8
10/19/2021	WF1	54.7	3.9	53.0	6.5
10/26/2021	WF1	58.3	3.9	51.9	7.5
11/2/2021	WF1	50.8	6.9	46.3	6.5
11/9/2021	WF1	47.9	7.5	46.9	7.7

In-Situ Data
(Daily Average)

Water Quality Monitoring
Lake Conway Point Removed
HUC 11110203 PJT# 19-900
Equilibrium, 5019441765

Sample Date	Site	Temperature (°F)	Dissolved Oxygen (mg/L)	Specific Conductance (uS/cm)	pH (S.U.)
11/16/2021	WF1	54.0	6.1	50.7	6.2
11/30/2021	WF1	42.1	9.6	35.8	6.6
12/7/2021	WF1	42.8	10.0	27.4	1.4
12/14/2021	WF1	48.7	11.0	24.6	6.7
12/19/2021	WF1	49.0	11.2	22.8	5.6
12/26/2021	WF1	50.3	11.0	24.6	6.6
1/4/2022	WF1	49.5	11.7	20.7	6.2
1/11/2022	WF1	44.3	12.6	20.7	6.3
1/18/2022	WF1	43.2	12.5	21.5	6.4
1/25/2022	WF1	42.4	13.2	21.6	6.6
2/1/2022	WF1	42.5	12.7	22.0	6.5
2/8/2022	WF1	43.4	13.3	22.1	6.6
2/15/2022	WF1	47.2	12.4	21.9	6.7
2/21/2022	WF1	47.2	11.8	21.5	6.4
2/28/2022	WF1	43.6	13.1	20.5	6.0
3/7/2022	WF1	50.6	12.0	20.0	6.5
3/14/2022	WF1	47.7	12.0	20.0	6.6
3/21/2022	WF1	54.7	11.2	21.5	6.6
3/28/2022	WF1	53.8	11.4	18.8	6.3
4/4/2022	WF1	54.8	10.5	20.2	6.3
4/11/2022	WF1	57.4	9.9	20.4	6.2
4/18/2022	WF1	59.0	10.5	34.9	6.7
4/25/2022	WF1	60.8	10.3	26.5	5.9
5/2/2022	WF1	63.4	9.0	31.8	6.4
5/9/2022	WF1	62.8	9.5	27.7	6.1
5/16/2022	WF1	72.4	8.3	33.2	6.2
5/23/2022	WF1	68.7	8.9	30.4	6.3
6/6/2022	WF1	69.5	7.5	32.5	6.1
6/13/2022	WF1	75.5	7.6	35.0	6.4
6/20/2022	WF1	76.0	7.4	35.9	6.3
6/27/2022	WF1	73.0	6.3	46.8	6.4
7/5/2022	WF1	79.4	2.3	66.2	6.3
7/11/2022	WF1	75.9	3.1	78.8	6.5
7/18/2022	WF1	77.2	1.4	82.8	6.2
7/25/2022	WF1	78.0	2.8	93.3	6.7
8/1/2022	WF1	78.5	3.2	82.1	6.4
8/8/2022	WF1	78.4	2.3	92.5	6.6
8/15/2022	WF1	73.3	2.3	76.5	6.3
8/22/2022	WF1	74.0	2.9	87.0	6.6
8/29/2022	WF1	76.3	1.7	83.0	6.4
9/6/2022	WF1	73.1	2.4	95.6	6.6
9/12/2022	WF1	65.36	2.7	81.8	6.5
9/19/2022	WF1	71.71	3.04	91.19	6.62

In-Situ Data
(Daily Average)

Water Quality Monitoring
Lake Conway Point Removed
HUC 11110203 PJT# 19-900
Equilibrium, 5019441765

Station ID **WF2**
Stream Name **WEST FORK POINT REMOVE CREEK**
Site Location **CONWAY COUNTY, Bridge Hill RD BRIDGE CROSSING**
8 digit HUC **11110203**
Lat **35°26'6.59"N**
Long **92°43'4.08"W**

Sample Date	Site	Temperature (°F)	Dissolved Oxygen (mg/L)	Specific Conductance (uS/cm)	pH (S.U.)
11/12/2019	WF2	44.5	11.6	90.6	7.4
12/10/2019	WF2	47.7	11.7	24.7	6.4
12/17/2019	WF2	44.7	12.7	26.3	6.5
12/31/2019	WF2	47.7	12.1	24.9	6.6
1/14/2020	WF2	49.7	11.9	22.6	6.3
1/21/2020	WF2	42.8	12.5	88.1	4.4
1/28/2020	WF2	45.7	12.6	23.6	6.5
2/4/2020	WF2	45.9	11.4	87.9	4.5
2/11/2020	WF2	44.6	12.0	96.3	4.7
2/18/2020	WF2	46.9	12.4	23.8	6.6
2/25/2020	WF2	45.2	11.8	87.1	4.6
3/3/2020	WF2	46.9	11.6	88.5	4.6
3/10/2020	WF2	55.0	11.6	24.2	7.3
3/17/2020	WF2	48.1	11.5	83.9	6.0
3/24/2020	WF2	53.9	10.5	22.0	6.8
3/31/2020	WF2	51.9	10.9	65.6	6.1
4/7/2020	WF2	60.9	10.1	25.8	7.1
4/13/2020	WF2	53.4		81.3	6.2
4/21/2020	WF2	60.4	10.3	23.8	7.2
4/28/2020	WF2	55.3	10.3	83.3	6.1
5/5/2020	WF2	65.0	9.3	25.0	7.1
5/12/2020	WF2	54.4	9.9	82.0	6.2
5/19/2020	WF2	65.2	9.3	23.9	6.8
6/2/2020	WF2	71.0	8.7	26.4	6.9
6/9/2020	WF2	67.2	8.5	78.5	6.4
6/16/2020	WF2	73.4	7.8	27.7	7.0
6/22/2020	WF2	74.1	7.6	29.2	7.0
6/30/2020	WF2	75.7	7.6	32.6	7.2
7/6/2020	WF2	80.0	7.5	29.2	7.3
7/13/2020	WF2	70.6	7.7	77.8	7.0
7/20/2020	WF2	81.5	7.3	33.6	7.1
8/3/2020	WF2	76.7	8.0	33.1	7.0
8/10/2020	WF2	70.6	8.6	80.3	7.2
8/17/2020	WF2	76.8	9.5	32.2	7.5
8/24/2020	WF2	68.3	6.8	79.8	7.1
8/31/2020	WF2	67.5	7.6	72.5	7.2
9/6/2020	WF2	75.3	8.0	28.3	7.3
9/14/2020	WF2	75.5	8.0	31.5	7.2
9/21/2020	WF2	61.1	8.8	72.1	6.7
10/5/2020	WF2	53.6	9.7	75.7	6.9
10/12/2020	WF2	70.2	8.3	33.0	7.3
10/19/2020	WF2	56.9	8.5	75.9	6.6
10/26/2020	WF2	54.8	9.4	35.9	7.3
11/10/2020	WF2	58.0	9.5	80.3	6.3

In-Situ Data
(Daily Average)

Water Quality Monitoring
Lake Conway Point Removed
HUC 11110203 PJT# 19-900
Equilibrium, 5019441765

Sample Date	Site	Temperature (°F)	Dissolved Oxygen (mg/L)	Specific Conductance (uS/cm)	pH (S.U.)
11/17/2020	WF2	47.4	10.9	32.7	7.0
11/21/2020	WF2	52.1	10.3	80.9	6.2
12/8/2020	WF2	42.1	12.1	80.6	6.7
12/28/2020	WF2	37.0	13.1	111.2	7.4
1/12/2021	WF2	36.4	13.3	105.1	7.5
1/26/2021	WF2	45.1	11.2	65.7	10.0
2/2/2021	WF2	42.2	12.3	73.2	4.7
2/9/2021	WF2	42.4	12.7	25.9	6.7
2/23/2021	WF2	43.9	12.9	27.1	6.5
3/2/2021	WF2	45.2	12.2	27.5	6.4
3/8/2021	WF2	53.1	11.6	25.1	6.6
3/16/2021	WF2	55.1	10.8	26.7	6.5
3/23/2021	WF2	53.7	10.3	27.0	6.6
3/30/2021	WF2	56.2	10.4	26.4	6.5
4/6/2021	WF2	57.4	10.1	36.3	7.0
4/13/2021	WF2	62.9	9.9	24.8	6.9
4/20/2021	WF2	56.5	10.2	27.6	7.9
4/27/2021	WF2	62.3	9.9	26.1	6.7
5/4/2021	WF2	63.0	9.2	24.0	6.2
5/11/2021	WF2	62.9	9.5	27.5	6.3
5/18/2021	WF2	65.1	8.9	27.7	6.3
5/25/2021	WF2	64.5	9.3	22.4	6.3
6/1/2021	WF2	64.9	9.1	25.1	6.4
6/8/2021	WF2	65.9	8.9	24.8	6.2
6/15/2021	WF2	72.3	8.4	27.0	6.4
6/22/2021	WF2	72.3	8.0	31.4	6.4
6/29/2021	WF2	76.6	7.8	32.0	6.7
7/6/2021	WF2	76.3	8.2	32.7	8.9
7/13/2021	WF2	74.0	8.0	32.0	6.7
7/20/2021	WF2	74.1	7.8	31.1	10.9
7/27/2021	WF2	79.9	7.5	32.7	6.6
8/3/2021	WF2	76.3	7.8	35.5	10.2
8/10/2021	WF2	77.2	7.5	33.7	6.7
8/17/2021	WF2	78.5	8.1	32.2	6.6
8/24/2021	WF2	79.6	7.0	38.6	6.7
8/31/2021	WF2	77.0	6.9	38.7	6.6
9/7/2021	WF2	75.7	7.3	39.4	6.7
9/14/2021	WF2	77.5	7.9	38.6	6.8
9/21/2021	WF2	73.9	6.6	33.9	7.4
9/28/2021	WF2	66.4	7.0	31.9	7.3
10/5/2021	WF2	69.1	7.8	30.2	6.6
10/12/2021	WF2	64.2	6.8	30.3	7.0
10/19/2021	WF2	56.4	9.2	29.2	6.8
10/26/2021	WF2	59.5	7.4	30.5	7.4
11/2/2021	WF2	53.1	9.8	25.4	6.6
11/9/2021	WF2	50.3	10.0	25.9	7.5

In-Situ Data
(Daily Average)

Water Quality Monitoring
Lake Conway Point Removed
HUC 11110203 PJT# 19-900
Equilibrium, 5019441765

Sample Date	Site	Temperature (°F)	Dissolved Oxygen (mg/L)	Specific Conductance (uS/cm)	pH (S.U.)
11/16/2021	WF2	54.2	10.2	22.8	6.5
11/30/2021	WF2	44.2	10.8	23.9	6.5
12/7/2021	WF2	44.9	11.0	23.7	-0.7
12/14/2021	WF2	47.9	11.2	23.7	6.7
12/19/2021	WF2	48.7	11.1	20.3	6.0
12/26/2021	WF2	49.8	10.9	22.9	6.6
1/4/2022	WF2	49.4	11.6	17.6	6.2
1/11/2022	WF2	44.3	12.5	19.0	6.2
1/18/2022	WF2	43.7	12.5	19.8	6.4
1/25/2022	WF2	42.9	13.0	19.7	6.5
2/1/2022	WF2	43.2	12.5	19.3	6.5
2/8/2022	WF2	44.6	12.9	18.3	6.6
2/15/2022	WF2	46.9	12.2	18.4	6.6
2/21/2022	WF2	47.1	11.9	18.5	6.4
2/28/2022	WF2	43.6	13.1	20.5	6.0
3/7/2022	WF2	50.6	12.0	20.0	6.5
3/14/2022	WF2	47.7	12.0	20.0	6.6
3/21/2022	WF2	54.7	11.2	21.5	6.6
3/28/2022	WF2	53.8	11.4	18.8	6.3
4/4/2022	WF2	54.8	10.5	20.2	6.3
4/11/2022	WF2	57.4	9.9	20.4	6.2
4/18/2022	WF2	59.0	10.5	34.9	6.7
4/25/2022	WF2	60.8	10.3	26.5	5.9
5/2/2022	WF2	63.4	9.0	31.8	6.4
5/9/2022	WF2	62.8	9.5	27.7	6.1
5/16/2022	WF2	72.4	8.3	33.2	6.2
5/23/2022	WF2	68.7	8.9	30.4	6.3
6/6/2022	WF2	69.9	8.0	28.7	6.1
6/13/2022	WF2	76.9	7.6	31.1	6.3
6/20/2022	WF2	74.9	8.1	31.1	6.3
6/27/2022	WF2	75.6	7.3	43.9	6.5
7/5/2022	WF2	80.2	6.2	38.5	6.3
7/11/2022	WF2	77.0	5.1	48.7	6.4
7/18/2022	WF2	79.7	4.7	41.3	6.2
7/25/2022	WF2	79.1	4.8	57.7	6.8
8/1/2022	WF2	79.6	4.7	46.5	6.2
8/8/2022	WF2	78.7	4.9	56.6	6.7
8/15/2022	WF2	74.2	5.4	45.8	6.5
8/22/2022	WF2	75.8	6.2	46.2	6.5
8/29/2022	WF2	77.2	6.7	39.0	6.4
9/6/2022	WF2	73.9	7.0	38.6	6.6
9/12/2022	WF2	67.9	6.8	34.5	6.4
9/19/2022	WF2	73.21	6.4	43.7	6.6

In-Situ Data
(Daily Average)

Water Quality Monitoring
Lake Conway Point Removed
HUC 11110203 PJT# 19-900
Equilibrium, 5019441765

Station ID **WF3**
Stream Name **WEST FORK POINT REMOVE CREEK**
Site Location **POPE COUNTY, NEAR HWY 247 BRIDGE CROSSING AND USGS GAUGE**
8 digit HUC **11110203**
Lat **35°19'26.50"N**
Long **92°52'22.15"W**

Sample Date	Site	Temperature (°F)	Dissolved Oxygen (mg/L)	Specific Conductance (uS/cm)	pH (S.U.)
11/12/2019	WF3	44.5	11.3	97.2	7.7
12/10/2019	WF3	48.9	11.3	33.9	6.5
12/17/2019	WF3	44.3	12.5	38.1	6.7
12/31/2019	WF3	45.5	12.1	35.1	6.7
1/14/2020	WF3	48.1	11.9	28.4	6.5
1/21/2020	WF3	40.9	12.5	93.3	4.6
1/28/2020	WF3	45.4	12.4	31.8	6.7
2/4/2020	WF3	47.6	11.1	94.9	4.7
2/11/2020	WF3	45.6	11.6	91.8	4.8
2/18/2020	WF3	48.8	11.8	28.5	6.7
2/25/2020	WF3	46.4	11.5	92.6	4.8
3/3/2020	WF3	49.0	11.1	94.8	4.8
3/10/2020	WF3	53.8	11.3	36.5	7.2
3/17/2020	WF3	48.1	11.3	90.2	6.1
3/24/2020	WF3	54.6	10.3	30.9	6.9
3/31/2020	WF3	51.4	10.7	84.6	6.3
4/7/2020	WF3	61.1	9.7	32.4	7.3
4/13/2020	WF3	53.4		86.8	6.2
4/21/2020	WF3	59.3	9.9	32.8	7.0
4/28/2020	WF3	55.5	10.1	89.9	6.2
5/5/2020	WF3	68.4	9.0	0.9	6.7
5/12/2020	WF3	54.7	9.9	91.2	6.2
5/19/2020	WF3	64.1	9.1	31.8	7.4
6/2/2020	WF3	69.8	8.7	31.5	7.1
6/9/2020	WF3	68.5	8.1	87.7	6.6
6/16/2020	WF3	77.2	7.3	38.2	7.1
6/22/2020	WF3	76.8	7.2	40.9	7.2
6/30/2020	WF3	77.8	6.4	46.6	7.1
7/6/2020	WF3	79.9	7.1	40.9	7.6
7/13/2020	WF3	73.0	7.1	89.2	6.9
7/20/2020	WF3	85.2	6.5	50.7	7.1
8/3/2020	WF3	78.9	6.8	53.4	7.2
8/10/2020	WF3	72.3	6.4	98.3	7.5
8/17/2020	WF3	80.7	6.8	49.5	7.6
8/24/2020	WF3	69.1	6.1	94.9	7.4
8/31/2020	WF3	69.5	6.5	83.7	7.2
9/6/2020	WF3	76.5	8.1	37.2	7.6
9/14/2020	WF3	76.3	8.2	43.0	7.5
9/21/2020	WF3	63.0	8.5	86.5	6.9
10/5/2020	WF3	55.8	9.1	93.7	7.0
10/12/2020	WF3	70.0	7.6	55.9	7.4
10/19/2020	WF3	57.9	8.0	95.9	6.9
10/26/2020	WF3	56.5	7.4	61.3	7.4
11/10/2020	WF3	57.3	8.8	96.3	6.5

In-Situ Data
(Daily Average)

Water Quality Monitoring
Lake Conway Point Removed
HUC 11110203 PJT# 19-900
Equilibrium, 5019441765

Sample Date	Site	Temperature (°F)	Dissolved Oxygen (mg/L)	Specific Conductance (uS/cm)	pH (S.U.)
11/17/2020	WF3	49.6	9.6	52.6	7.1
11/21/2020	WF3	52.1	9.8	96.7	6.2
12/8/2020	WF3	42.2	12.0	92.3	6.9
12/28/2020	WF3	37.0	12.8	119.7	7.4
1/12/2021	WF3	35.9	13.2	112.4	7.5
1/26/2021	WF3	45.5	10.9	75.1	10.4
2/2/2021	WF3	42.5	12.0	79.8	4.9
2/9/2021	WF3	42.4	12.6	37.4	6.9
2/23/2021	WF3	42.0	13.2	42.3	6.8
3/2/2021	WF3	45.2	11.9	34.9	6.6
3/8/2021	WF3	50.6	11.9	36.6	6.8
3/16/2021	WF3	54.5	10.2	36.5	6.6
3/23/2021	WF3	55.0	9.9	36.2	6.7
3/30/2021	WF3	55.4	10.5	33.7	6.8
4/6/2021	WF3	59.8	9.3	35.9	6.7
4/13/2021	WF3	62.8	9.3	38.0	6.9
4/20/2021	WF3	59.0	9.9	35.8	6.8
4/27/2021	WF3	62.5	9.7	34.2	6.9
5/4/2021	WF3	63.4	9.0	33.3	6.5
5/11/2021	WF3	61.3	9.5	32.6	6.6
5/18/2021	WF3	65.6	8.8	36.8	6.6
5/25/2021	WF3	65.4	9.0	29.8	6.4
6/1/2021	WF3	65.8	8.8	35.1	6.6
6/8/2021	WF3	67.3	8.7	29.7	6.5
6/15/2021	WF3	73.2	8.1	30.9	6.6
6/22/2021	WF3	73.5	7.8	41.2	6.8
6/29/2021	WF3	80.1	7.0	48.0	6.9
7/6/2021	WF3	78.4	7.3	49.8	8.2
7/13/2021	WF3	77.6	7.0	44.9	6.9
7/20/2021	WF3	77.3	7.0	44.9	10.8
7/27/2021	WF3	83.7	6.2	47.5	6.7
8/3/2021	WF3	79.1	6.0	50.2	9.7
8/10/2021	WF3	80.9	6.0	42.6	6.7
8/17/2021	WF3	79.9	6.8	42.7	6.7
8/24/2021	WF3	81.8	5.5	49.4	6.7
8/31/2021	WF3	77.3	5.0	52.4	6.5
9/7/2021	WF3	74.5	5.0	57.7	6.5
9/14/2021	WF3	76.8	7.5	58.5	6.4
9/21/2021	WF3	75.1	5.8	52.0	7.2
9/28/2021	WF3	67.1	7.1	52.7	7.1
10/5/2021	WF3	68.1	6.4	54.0	6.5
10/12/2021	WF3	67.2	6.5	50.5	6.9
10/19/2021	WF3	56.8	7.6	52.9	6.6
10/26/2021	WF3	61.4	6.9	48.3	7.4
11/2/2021	WF3	53.1	8.3	37.4	6.7
11/9/2021	WF3	48.8	9.4	40.0	7.6

In-Situ Data
(Daily Average)

Water Quality Monitoring
Lake Conway Point Removed
HUC 11110203 PJT# 19-900
Equilibrium, 5019441765

Sample Date	Site	Temperature (°F)	Dissolved Oxygen (mg/L)	Specific Conductance (uS/cm)	pH (S.U.)
11/16/2021	WF3	50.3	9.0	40.3	6.8
11/30/2021	WF3	43.2	9.9	39.6	6.7
12/7/2021	WF3	46.5	8.8	39.8	0.1
12/14/2021	WF3	46.9	10.1	40.8	6.9
12/19/2021	WF3	48.1	10.9	31.7	4.1
12/26/2021	WF3	51.8	10.2	31.1	6.8
1/4/2022	WF3	47.1	12.0	25.4	6.6
1/11/2022	WF3	42.5	12.7	23.8	6.5
1/18/2022	WF3	42.5	12.6	26.6	6.7
1/25/2022	WF3	42.3	13.0	27.5	6.7
2/1/2022	WF3	42.8	12.5	28.9	6.7
2/8/2022	WF3	42.6	13.5	27.1	6.8
2/15/2022	WF3	44.9	12.8	26.4	6.9
2/21/2022	WF3	46.6	12.0	25.3	6.7
2/28/2022	WF3	46.8	12.9	21.4	6.2
3/7/2022	WF3	51.1	11.3	26.5	6.7
3/14/2022	WF3	46.3	12.2	22.6	6.7
3/21/2022	WF3	55.0	10.9	25.8	6.5
3/28/2022	WF3	52.2	11.4	21.1	6.5
4/4/2022	WF3	55.1	10.2	23.8	6.5
4/11/2022	WF3	57.8	9.7	22.9	6.3
4/18/2022	WF3	56.8	10.5	32.1	6.5
4/25/2022	WF3	61.0	9.5	22.4	5.8
5/2/2022	WF3	62.0	9.2	30.9	6.4
5/9/2022	WF3	62.7	9.2	28.8	6.2
5/16/2022	WF3	68.4	8.7	36.6	6.5
5/23/2022	WF3	67.2	8.9	38.8	6.4
6/6/2022	WF3	72.4	7.2	41.3	6.1
6/13/2022	WF3	79.5	7.0	48.6	6.5
6/20/2022	WF3	78.6	6.8	49.5	6.3
6/27/2022	WF3	79.1	6.0	78.9	6.5
7/5/2022	WF3	81.2	5.6	62.9	6.2
7/11/2022	WF3	80.1	5.5	73.0	6.3
7/18/2022	WF3	80.1	6.1	65.8	6.1
7/25/2022	WF3	82.6	6.4	82.7	6.3
8/1/2022	WF3	77.3	5.5	62.7	6.3
8/8/2022	WF3	81.7	5.9	73.0	6.4
8/15/2022	WF3	76.3	5.8	60.1	6.1
8/22/2022	WF3	76.0	6.1	52.0	6.4
8/29/2022	WF3	79.0	5.2	50.2	6.1
9/6/2022	WF3	74.7	5.5	60.7	6.3
9/12/2022	WF3	69.1	6.4	54.9	6.2
9/19/2022	WF3	74.70	6.7	64.3	6.3

In-Situ Data
(Daily Average)

Water Quality Monitoring
Lake Conway Point Removed
HUC 11110203 PJT# 19-900
Equilibrium, 5019441765

Stream Name **White Oak Creek**
Site Location **POPE COUNTY, AT UNION GROVE RD BRIDGE CROSSING**
8 digit HUC **11110203**
Lat **35°15'16.96"N**
Long **92°53'38.97"W**

Sample Date	Site	Temperature (°F)	Dissolved Oxygen (mg/L)	Specific Conductance (uS/cm)	pH (S.U.)
11/12/2019	WO	38.3	12.1	151.8	7.8
12/10/2019	WO	45.7	11.7	139.2	6.9
12/17/2019	WO	41.6	12.9	176.1	7.0
12/31/2019	WO	42.4	12.3	128.4	6.8
1/14/2020	WO	45.7	11.9	133.9	6.6
1/21/2020	WO	36.9	13.0	218.5	5.3
1/28/2020	WO	45.5	12.2	131.5	6.9
2/4/2020	WO	50.0	10.3	212.5	5.2
2/11/2020	WO	44.9	11.3	156.6	5.2
2/18/2020	WO	51.3	11.0	90.3	6.9
2/25/2020	WO	47.5	11.1	180.8	5.3
3/3/2020	WO	50.1	10.8	244.8	5.5
3/10/2020	WO	54.6	11.0	145.7	7.2
3/17/2020	WO	47.8	11.1	145.0	6.5
3/24/2020	WO	55.0	9.7	87.2	6.8
3/31/2020	WO	51.0	10.3	111.3	6.5
4/7/2020	WO	62.3	8.7	147.1	7.0
4/13/2020	WO	52.2		131.4	6.5
4/21/2020	WO	59.5	9.5	125.4	7.0
4/28/2020	WO	56.2	9.6	191.3	6.6
5/5/2020	WO	66.3	8.1	101.1	7.0
5/12/2020	WO	50.8	9.1	237.6	6.8
5/19/2020	WO	63.8	8.9	111.1	7.1
6/2/2020	WO	67.2	8.3	186.2	7.0
6/9/2020	WO	67.3	8.1	149.6	6.9
6/16/2020	WO	72.7	7.4	271.4	7.2
6/22/2020	WO	74.6	8.1	367.5	7.2
6/30/2020	WO	74.5	6.9	519.8	7.3
7/6/2020	WO	76.3	7.0	318.9	7.4
7/13/2020	WO	70.1	6.3	330.4	7.4
7/20/2020	WO	81.9	6.7	435.6	7.2
8/3/2020	WO	74.2	7.4	215.6	7.4
8/10/2020	WO	69.2	2.6	922.4	7.5
8/17/2020	WO	75.5	7.3	455.0	7.5
8/24/2020	WO	66.9	2.4	492.2	7.4
8/31/2020	WO	67.2	5.3	186.2	7.3
9/6/2020	WO	77.1	7.1	125.8	7.4
9/14/2020	WO	74.9	8.4	199.4	7.3
9/21/2020	WO	58.6	8.1	171.4	7.1
10/5/2020	WO	50.1	2.7	364.0	6.7
10/12/2020	WO	67.7	1.0	473.2	6.9
10/19/2020	WO	57.4	1.7	657.2	6.7
10/26/2020	WO	52.9	1.7	690.7	6.7
11/10/2020	WO	58.7	5.4	279.7	6.6

In-Situ Data
(Daily Average)

Water Quality Monitoring
Lake Conway Point Removed
HUC 11110203 PJT# 19-900
Equilibrium, 5019441765

Sample Date	Site	Temperature (°F)	Dissolved Oxygen (mg/L)	Specific Conductance (uS/cm)	pH (S.U.)
11/17/2020	WO	43.6	6.8	273.8	6.9
11/21/2020	WO	52.6	5.5	336.2	6.2
12/8/2020	WO	39.1	11.2	208.4	6.9
12/28/2020	WO	36.6	12.0	241.1	8.1
1/12/2021	WO	32.3	13.5	193.1	7.7
1/26/2021	WO	45.5	10.4	118.0	11.5
2/2/2021	WO	39.2	12.2	180.7	6.5
2/9/2021	WO	41.4	12.8	157.8	7.0
2/23/2021	WO	42.6	12.9	117.8	6.8
3/2/2021	WO	44.0	11.8	98.6	6.8
3/8/2021	WO	52.1	11.8	149.5	7.0
3/16/2021	WO	53.7	10.0	130.3	6.9
3/23/2021	WO	55.2	9.4	69.9	6.8
3/30/2021	WO	54.9	10.4	135.8	7.1
4/6/2021	WO	58.7	8.7	189.2	7.0
4/13/2021	WO	60.9	9.7	227.1	7.2
4/20/2021	WO	57.4	10.0	184.7	6.9
4/27/2021	WO	62.9	9.0	133.3	7.0
5/4/2021	WO	65.6	8.1	62.8	6.6
5/11/2021	WO	59.3	9.3	158.9	6.9
5/18/2021	WO	66.3	8.5	88.9	6.7
5/25/2021	WO	69.4	7.9	135.8	6.8
6/1/2021	WO	64.9	8.4	115.8	6.8
6/8/2021	WO	71.3	7.7	118.1	6.8
6/15/2021	WO	73.9	7.2	199.3	6.8
6/22/2021	WO	68.6	6.5	179.8	7.0
6/29/2021	WO	77.8	4.8	583.8	7.1
7/6/2021	WO	75.2	6.3	253.5	9.2
7/13/2021	WO	73.9	5.1	497.5	7.0
7/20/2021	WO	73.0	4.6	165.8	11.0
7/27/2021	WO	80.8	5.9	272.1	7.1
8/3/2021	WO	73.6	5.6	492.9	10.5
8/10/2021	WO	76.2	4.0	603.2	7.1
8/17/2021	WO	78.1	10.9	578.5	8.2
8/24/2021	WO	77.9	4.9	244.6	7.3
8/31/2021	WO	73.7	6.2	233.7	7.4
9/7/2021	WO	71.5	3.8	342.8	7.2
9/14/2021	WO	77.7	8.5	282.7	7.6
9/21/2021	WO	72.9	7.3	55.2	7.9
9/28/2021	WO	63.6	6.5	100.0	7.8
10/5/2021	WO	63.7	6.9	151.9	7.0
10/12/2021	WO	60.9	6.2	161.6	7.5
10/19/2021	WO	53.1	6.0	153.7	6.9
10/26/2021	WO	56.7	6.2	119.3	8.2
11/2/2021	WO	50.3	8.8	89.8	6.9
11/9/2021	WO	47.8	9.4	122.5	8.5

In-Situ Data
(Daily Average)

Water Quality Monitoring
Lake Conway Point Removed
HUC 11110203 PJT# 19-900
Equilibrium, 5019441765

Sample Date	Site	Temperature (°F)	Dissolved Oxygen (mg/L)	Specific Conductance (uS/cm)	pH (S.U.)
11/16/2021	WO	52.7	9.5	91.8	6.9
11/30/2021	WO	41.9	9.2	128.8	7.1
12/7/2021	WO	41.8	7.5	159.5	3.6
12/14/2021	WO	48.1	1.7	289.0	7.3
12/19/2021	WO	44.2	10.6	75.7	4.9
12/26/2021	WO	52.4	8.7	115.6	7.0
1/4/2022	WO	38.7	13.1	77.9	7.0
1/11/2022	WO	39.0	13.1	81.4	6.6
1/18/2022	WO	38.7	12.6	84.8	6.9
1/25/2022	WO	39.5	10.2	131.4	6.8
2/1/2022	WO	43.5	11.1	117.0	6.9
2/8/2022	WO	42.2	13.4	114.8	6.5
2/15/2022	WO	43.3	13.1	127.2	7.1
2/21/2022	WO	48.1	11.4	100.4	6.9
2/28/2022	WO	48.9	11.9	77.2	6.5
3/7/2022	WO	49.7	11.1	55.2	6.6
3/14/2022	WO	45.2	12.1	90.7	6.7
3/21/2022	WO	55.2	12.8	115.5	7.9
3/28/2022	WO	52.6	11.9	87.9	6.4
4/4/2022	WO	55.8	10.0	94.9	6.9
4/11/2022	WO	60.1	8.7	97.1	6.6
4/18/2022	WO	57.2	10.2	110.6	6.8
4/25/2022	WO	62.8	8.5	62.9	6.1
5/2/2022	WO	61.2	8.6	151.1	6.8
5/9/2022	WO	67.1	7.2	125.8	6.5
5/16/2022	WO	69.5	5.5	143.9	6.7
5/23/2022	WO	63.3	7.3	144.1	6.5
6/6/2022	WO	67.8	5.6	326.4	6.7
6/13/2022	WO	76.8	2.0	291.7	7.0
6/20/2022	WO	72.3	5.0	305.3	6.9
6/27/2022	WO	76.5	8.2	395.3	7.3
7/5/2022	WO	80.2	6.5	450.8	7.0
7/11/2022	WO	80.5	10.4	623.0	8.0
7/18/2022	WO	76.0	5.9	82.3	6.4
7/25/2022	WO	83.6	8.6	206.9	7.5
8/1/2022	WO	75.8	4.9	190.6	6.8
8/8/2022	WO	78.8	9.7	230.5	8.2
8/15/2022	WO	71.7	3.1	254.5	6.8
8/22/2022	WO	73.9	6.6	152.1	6.9
8/29/2022	WO	75.1	5.9	132.1	6.9
9/6/2022	WO	72.0	5.4	113.2	6.7
9/12/2022	WO	61.6	5.6	145.1	6.9
9/19/2022	WO	71.5	6.0	163.6	7.1

Appendix III
Monthly Loading Data

Station ID CYP
Stream Name CYPRESS CREEK
Site Location PERRY COUNTY, AT HWY 113 BRIDGE CROSSING
Lat 35° 4'2.13"N
Long 92°44'32.21"W

Monthly Loads at CYP

Year	Month	Total Phosphorus (lbs)	TKN (lbs)	Ammonia-Nitrongen (lbs)	TSS (lbs)	Sulfate (lbs)	Chloride (lbs)	NO3+NO2 Nitrogen (lbs)	Total Nitrogen (lbs)
2019	Nov-19	264	1,090	40	13,000	12,900	13,900	242	1,330
	Dec-19	198	840	58	8,390	14,400	10,400	419	1,260
2020	Jan-20	1,800	10,900	604	62,600	117,000	103,000	4,100	15,000
	Feb-20	1,030	7,580	395	71,600	90,600	71,000	4,960	12,500
	Mar-20	4,620	28,300	1,390	317,000	171,000	150,000	5,060	33,400
	Apr-20	6,710	29,200	2,590	664,000	119,000	101,000	3,860	33,100
	May-20	5,950	31,400	3,160	535,000	121,000	101,000	3,950	35,300
	Jun-20	1,260	5,770	718	160,000	22,200	20,100	1,010	6,770
	Jul-20	51	264	18	6,480	1,290	1,710	41	305
	Aug-20	81	518	88	9,080	2,470	3,560	49	567
	Sep-20	402	2,000	222	52,800	10,700	9,900	597	2,590
	Oct-20	37	175	9	3,260	1,500	2,040	26	201
	Nov-20	356	1,030	23	28,200	4,500	15,700	66	1,090
	Dec-20	484	1,720	68	21,700	15,200	27,700	523	2,240
2021	Jan-21	1,250	5,350	205	84,100	62,400	66,200	2,530	7,870
	Feb-21	695	3,860	183	86,100	50,700	56,100	1,630	5,490
	Mar-21	4,370	27,400	667	1,190,000	125,000	123,000	5,670	33,100
	Apr-21	2,040	11,500	932	139,000	67,500	80,800	2,020	13,500
	May-21	11,700	52,400	4,440	1,050,000	197,000	222,000	6,200	58,600
	Jun-21	3,210	13,400	1,350	873,000	55,100	55,200	3,210	16,600
	Jul-21	353	1,800	121	38,800	10,000	14,600	220	2,020
	Aug-21	100	691	38	11,500	3,630	6,560	45	735
	Sep-21	51	340	20	7,530	1,150	3,240	37	376
	Oct-21	59	467	17	9,950	1,780	5,250	23	491
	Nov-21	196	829	10	13,300	3,870	9,960	11	840
	Dec-21	518	2,260	46	83,000	14,800	20,000	422	2,680
2022	Jan-22	601	3,790	133	35,300	36,100	30,200	1,500	5,290
	Feb-22	569	4,010	227	31,700	50,600	58,200	1,140	5,150
	Mar-22	1,550	11,000	416	114,000	106,000	113,000	3,220	14,200
	Apr-22	2,410	13,200	512	308,000	78,800	70,600	2,820	16,000
	May-22	5,670	25,600	3,020	1,430,000	118,000	108,000	6,520	32,100
	Jun-22	3,790	14,200	1,080	312,000	72,400	96,500	5,080	19,300
	Jul-22	73	404	24	11,900	2,890	3,990	148	552
	Aug-22	42	359	21	8,260	1,330	4,180	66	426
	Sep-22	38	351	23	8,740	784	3,440	62	412
	Oct-22	1	9	1	385	15	139	1	10

Station ID EF1
Stream Name EAST FORK POINT REMOVE CREEK
Site Location CONWAY COUNTY, HWY 124 BRIDGE CROSSING
Lat 35°23'47.04"N
Long 92°39'32.79"W

Monthly Loads at EF1

Year	Month	Total Phosphorus (lbs)	TKN (lbs)	Ammonia-Nitrongen (lbs)	TSS (lbs)	Sulfate (lbs)	Chloride (lbs)	NO3+NO2 Nitrogen (lbs)	Total Nitrogen (lbs)
2019	Nov-19	1,210	9,330	685	116,000	109,000	67,200	11,700	21,100
	Dec-19	692	5,430	341	51,900	75,800	37,400	7,740	13,200
2020	Jan-20	1,500	14,200	842	179,000	147,000	80,400	17,500	31,600
	Feb-20	867	9,480	587	132,000	123,000	64,400	13,000	22,500
	Mar-20	1,690	15,400	834	320,000	164,000	87,200	15,800	31,200
	Apr-20	1,810	15,200	945	328,000	112,000	61,800	8,820	24,000
	May-20	2,980	20,200	1,220	652,000	111,000	64,900	8,700	28,900
	Jun-20	946	6,450	395	149,000	33,200	20,800	2,430	8,870
	Jul-20	75	783	65	11,700	8,380	4,900	526	1,310
	Aug-20	25	261	11	2,650	2,430	1,790	99	360
	Sep-20	470	4,900	284	76,400	33,200	23,100	2,730	7,630
	Oct-20	11	152	10	1,160	2,130	1,800	34	186
	Nov-20	44	563	24	4,190	7,880	6,600	198	761
	Dec-20	156	1,940	147	20,200	23,400	18,300	2,130	4,070
2021	Jan-21	551	5,370	347	58,400	67,300	48,500	7,940	13,300
	Feb-21	289	2,470	85	34,200	38,700	24,900	3,850	6,310
	Mar-21	1,380	10,600	457	372,000	93,100	58,300	8,830	19,400
	Apr-21	382	3,770	292	49,000	42,700	27,600	1,900	5,670
	May-21	2,400	18,100	900	478,000	119,000	75,600	7,380	25,500
	Jun-21	1,770	13,600	915	397,000	73,800	46,200	4,660	18,200
	Jul-21	76	749	44	11,000	4,800	4,020	383	1,130
	Aug-21	32	339	35	2,460	1,930	1,930	109	448
	Sep-21	90	1,280	159	13,100	4,440	8,030	157	1,440
	Oct-21	36	430	36	3,560	2,780	2,880	103	533
	Nov-21	36	502	12	3,610	6,840	3,950	20	522
	Dec-21	187	2,380	274	21,000	22,200	15,800	1,120	3,500
2022	Jan-22	1,500	11,300	861	143,000	84,700	59,700	15,000	26,300
	Feb-22	294	3,130	109	42,200	48,000	33,800	4,950	8,080
	Mar-22	860	10,600	283	172,000	121,000	75,400	9,060	19,600
	Apr-22	1,220	10,100	429	196,000	113,000	68,200	6,770	16,900
	May-22	1,110	8,530	984	210,000	76,200	43,800	4,110	12,600
	Jun-22	27	215	17	3,980	3,400	1,550	164	379
	Jul-22	62	722	58	9,710	3,800	4,340	114	837
	Aug-22	33	411	41	5,850	1,680	2,440	64	475
	Sep-22	113	1,440	92	18,200	6,310	11,100	91	1,530
	Oct-22	39	568	39	5,910	2,430	4,560	37	605

Station ID EF2
Stream Name EAST FORK POINT REMOVE CREEK
Site Location CONWAY COUNTY, HWY 95 BRIDGE CROSSING
Lat 35°15'48.52"N
Long 92°43'57.27"W

Monthly Loads at EF2

Year	Month	Total Phosphorus (lbs)	TKN (lbs)	Ammonia-Nitrogen (lbs)	TSS (lbs)	Sulfate (lbs)	Chloride (lbs)	NO3+NO2 Nitrogen (lbs)	Total Nitrogen (lbs)
2019	Nov-19	3,920	25,300	1,810	283,000	273,000	197,000	43,000	68,300
	Dec-19	3,120	18,000	1,110	199,000	186,000	128,000	34,700	52,800
2020	Jan-20	5,870	42,400	2,950	689,000	352,000	242,000	65,400	108,000
	Feb-20	3,510	29,000	1,640	683,000	319,000	221,000	59,900	88,900
	Mar-20	7,100	53,900	3,880	1,330,000	384,000	262,000	59,400	113,000
	Apr-20	9,770	57,000	5,890	2,700,000	322,000	212,000	42,900	99,900
	May-20	7,740	53,200	5,190	1,780,000	248,000	184,000	33,300	86,500
	Jun-20	2,300	13,900	1,260	530,000	70,500	53,400	7,930	21,900
	Jul-20	541	3,470	433	81,000	19,600	16,900	2,070	5,540
	Aug-20	508	3,750	647	49,200	12,400	15,100	772	4,520
	Sep-20	3,260	21,800	1,200	589,000	75,800	80,500	9,590	31,400
	Oct-20	156	1,250	225	23,100	7,720	9,010	399	1,650
	Nov-20	531	5,190	235	100,000	31,100	36,300	739	5,930
	Dec-20	752	9,350	922	110,000	88,200	81,400	10,000	19,400
2021	Jan-21	2,450	21,000	1,430	429,000	203,000	177,000	33,800	54,700
	Feb-21	1,050	8,890	421	163,000	115,000	91,100	16,900	25,800
	Mar-21	5,010	40,300	2,380	984,000	268,000	214,000	38,200	78,500
	Apr-21	1,900	15,500	989	656,000	113,000	87,600	9,140	24,700
	May-21	16,600	84,300	6,460	3,560,000	401,000	311,000	46,300	131,000
	Jun-21	7,050	42,400	3,790	1,320,000	225,000	175,000	28,400	70,800
	Jul-21	398	2,730	307	67,600	13,200	11,600	1,200	3,930
	Aug-21	9	60	12	1,020	193	251	11	71
	Sep-21	7	79	28	1,510	73	215	2	81
	Oct-21	17	177	75	2,150	235	459	11	188
	Nov-21	34	311	25	3,500	1,370	2,010	20	331
	Dec-21	740	7,810	1,670	161,000	28,900	29,800	3,370	11,200
2022	Jan-22	5,340	39,300	4,620	774,000	243,000	202,000	57,200	96,500
	Feb-22	1,480	15,700	465	276,000	189,000	150,000	25,500	41,200
	Mar-22	3,780	41,300	1,090	858,000	302,000	240,000	40,700	82,000
	Apr-22	4,970	39,400	1,490	1,040,000	330,000	242,000	34,500	73,900
	May-22	4,290	27,900	2,600	863,000	231,000	161,000	22,600	50,500
	Jun-22	333	2,410	306	76,400	18,100	15,700	1,710	4,120
	Jul-22	13	99	20	1,720	310	476	15	114
	Aug-22	3	43	18	441	38	132	1	44
	Sep-22	15	139	14	2,660	36	455	3	143
	Oct-22	7	60	0	1,200	0	199	1	61

Station ID GL
Stream Name Gum Log Creek
Site Location POPE COUNTY, AT AR HWY 247 BRIDGE CROSSING
Lat 35°17'12.45"N
Long 92°54'41.00"W

Monthly Loads at GL

Year	Month	Total Phosphorus (lbs)	TKN (lbs)	Ammonia-Nitrogen (lbs)	TSS (lbs)	Sulfate (lbs)	Chloride (lbs)	NO3+NO2 Nitrogen (lbs)	Total Nitrogen (lbs)
2019	Nov-19	886	5,480	477	68,600	167,000	54,500	13,600	19,100
	Dec-19	470	2,910	338	36,300	88,000	32,100	9,270	12,200
2020	Jan-20	559	4,370	354	62,400	153,000	51,600	13,000	17,300
	Feb-20	1,170	6,420	333	343,000	100,000	46,000	10,800	17,200
	Mar-20	1,900	10,600	552	843,000	111,000	46,600	10,300	20,800
	Apr-20	1,460	6,750	480	393,000	89,700	35,400	7,030	13,800
	May-20	596	4,740	397	155,000	76,800	33,300	4,680	9,420
	Jun-20	194	1,100	105	45,400	10,600	3,900	438	1,530
	Jul-20	0	0	0	0	0	0	0	0
	Aug-20	6	50	11	461	1,470	450	11	61
	Sep-20	940	4,830	531	83,700	105,000	22,100	3,510	8,340
	Oct-20	31	271	22	3,170	10,100	3,940	63	333
	Nov-20	137	1,070	54	18,900	59,200	19,700	904	1,980
	Dec-20	246	1,850	85	23,300	62,600	24,300	3,550	5,400
2021	Jan-21	606	3,570	300	75,300	110,000	40,700	8,730	12,300
	Feb-21	242	1,630	82	48,400	40,600	18,500	2,840	4,470
	Mar-21	873	5,500	276	315,000	72,700	34,800	5,450	11,000
	Apr-21	361	3,030	239	50,700	50,700	23,400	2,910	5,930
	May-21	2,960	11,800	1,050	1,010,000	164,000	68,900	9,390	21,200
	Jun-21	581	3,070	243	250,000	49,300	15,900	2,450	5,520
	Jul-21	5	39	6	688	819	605	25	64
	Aug-21	31	218	40	2,820	3,940	3,050	18	236
	Sep-21	37	241	62	3,980	631	1,570	11	252
	Oct-21	62	396	96	4,290	830	3,030	38	434
	Nov-21	158	803	63	16,100	2,390	5,280	18	821
	Dec-21	243	1,370	32	30,000	44,800	12,100	793	2,170
2022	Jan-22	443	3,310	236	46,300	132,000	37,600	12,500	15,900
	Feb-22	248	2,190	95	36,000	87,800	31,800	6,370	8,560
	Mar-22	581	5,850	166	182,000	124,000	41,500	8,110	14,000
	Apr-22	1,630	9,460	242	859,000	127,000	47,900	7,110	16,600
	May-22	777	5,150	462	248,000	87,100	27,000	4,200	9,350
	Jun-22	73	466	71	12,300	18,400	5,430	480	946
	Jul-22	1	11	2	190	80	80	3	14
	Aug-22	0	1	0	11	5	5	0	1
	Sep-22	2	21	4	345	25	99	1	22
	Oct-22	0	0	0	0	0	0	0	0

Station ID LCC
Stream Name Hackers Creek
Site Location POPE COUNTY, AT GRIFFEN FLAT RD BRIDGE CROSSING
Lat 35°19'48.34"N
Long 92°52'9.55"W

Monthly Loads at LCC

Year	Month	Total Phosphorus (lbs)	TKN (lbs)	Ammonia-Nitrongen (lbs)	TSS (lbs)	Sulfate (lbs)	Chloride (lbs)	NO3+NO2 Nitrogen (lbs)	Total Nitrogen (lbs)
2019	Nov-19	2,370	15,800	1,420	193,000	148,000	98,700	29,200	45,000
	Dec-19	1,520	9,860	722	104,000	94,700	59,100	21,500	31,300
2020	Jan-20	3,520	24,100	1,490	382,000	223,000	127,000	40,700	64,800
	Feb-20	1,600	13,600	837	247,000	169,000	97,800	30,200	43,800
	Mar-20	5,570	33,800	2,790	1,060,000	238,000	146,000	40,000	73,800
	Apr-20	3,740	20,800	1,410	712,000	141,000	81,900	18,700	39,600
	May-20	2,940	16,400	1,220	448,000	99,400	61,700	11,700	28,100
	Jun-20	693	4,270	332	80,700	30,100	20,600	3,460	7,730
	Jul-20	323	2,180	206	27,100	11,600	12,700	1,310	3,490
	Aug-20	141	1,210	101	17,200	8,330	9,660	460	1,670
	Sep-20	1,710	10,600	1,000	212,000	54,500	53,000	6,390	17,000
	Oct-20	124	1,380	85	11,200	14,100	13,400	913	2,290
	Nov-20	115	1,290	76	14,100	15,100	13,400	1,330	2,620
	Dec-20	198	1,970	132	25,200	26,000	20,600	3,650	5,620
2021	Jan-21	1,140	7,070	519	111,000	78,600	55,700	14,000	21,100
	Feb-21	294	2,240	100	32,900	33,700	22,000	4,950	7,180
	Mar-21	1,500	11,500	361	492,000	92,300	60,800	11,700	23,100
	Apr-21	808	6,550	356	109,000	59,900	41,400	5,780	12,300
	May-21	10,400	53,600	3,430	1,790,000	276,000	171,000	28,400	82,000
	Jun-21	3,520	20,700	2,130	818,000	99,200	61,900	10,200	30,900
	Jul-21	96	739	58	10,700	6,400	4,530	594	1,330
	Aug-21	41	356	32	4,270	2,760	3,160	68	423
	Sep-21	34	379	25	3,430	1,870	3,650	30	409
	Oct-21	38	477	32	3,280	2,230	4,650	52	529
	Nov-21	61	685	17	6,570	5,400	6,520	41	726
	Dec-21	394	2,500	320	28,100	17,800	13,900	1,990	4,490
2022	Jan-22	2,710	15,400	1,430	230,000	124,000	90,800	34,800	50,200
	Feb-22	827	6,950	547	96,200	102,000	75,000	16,600	23,600
	Mar-22	2,180	15,000	440	353,000	131,000	91,500	18,900	33,900
	Apr-22	3,430	21,400	922	711,000	160,000	106,000	17,100	38,500
	May-22	3,170	19,700	1,820	672,000	118,000	76,300	14,600	34,200
	Jun-22	175	1,080	112	17,400	9,590	7,380	995	2,080
	Jul-22	45	391	38	4,750	2,090	3,180	83	474
	Aug-22	49	442	49	6,650	1,960	3,720	93	535
	Sep-22	32	280	36	5,480	1,190	2,690	52	332
	Oct-22	1	14	1	77	68	156	4	19

Monthly Loading Estimations

Water Quality Monitoring
Lake Conway Point Removed
HUC 11110203 PJT# 19-900
Equilibrium, 5019441765

Station ID PR
Stream Name POINT REMOVE CREEK
Site Location CONWAY COUNTY, HWY 64 BRIDGE CROSSING
Lat 35°10'56.43"N
Long 92°47'2.77"W

Monthly Loads at PR

Year	Month	Total Phosphorus (lbs)	TKN (lbs)	Ammonia-Nitrongen (lbs)	TSS (lbs)	Sulfate (lbs)	Chloride (lbs)	NO3+NO2 Nitrogen (lbs)	Total Nitrogen (lbs)
2019	Nov-19	13,600	80,900	4,760	1,520,000	748,000	529,000	76,700	158,000
	Dec-19	14,300	73,800	4,760	1,030,000	630,000	432,000	66,100	140,000
2020	Jan-20	28,100	190,000	9,870	2,400,000	1,410,000	883,000	129,000	319,000
	Feb-20	13,600	113,000	6,510	2,330,000	1,010,000	716,000	115,000	228,000
	Mar-20	27,900	191,000	16,400	4,130,000	1,400,000	1,000,000	126,000	317,000
	Apr-20	35,800	231,000	18,500	7,560,000	1,260,000	825,000	88,000	319,000
	May-20	28,700	201,000	21,500	5,890,000	891,000	669,000	66,500	267,000
	Jun-20	5,580	37,500	5,230	1,480,000	180,000	155,000	11,700	49,300
	Jul-20	301	2,720	245	97,900	11,800	14,700	615	3,330
	Aug-20	248	1,780	151	82,100	11,200	23,800	360	2,140
	Sep-20	9,740	62,800	8,890	2,670,000	368,000	238,000	25,000	87,700
	Oct-20	139	1,010	69	43,100	16,300	22,900	279	1,290
	Nov-20	922	5,110	151	184,000	53,000	75,000	596	5,710
	Dec-20	2,960	17,900	867	492,000	214,000	165,000	15,300	33,300
2021	Jan-21	12,900	80,400	5,560	1,610,000	790,000	609,000	70,600	151,000
	Feb-21	6,100	38,200	2,590	869,000	446,000	599,000	27,700	65,900
	Mar-21	24,300	163,000	8,600	5,370,000	1,130,000	947,000	68,600	231,000
	Apr-21	7,800	59,900	5,210	2,360,000	483,000	430,000	25,100	85,000
	May-21	67,300	371,000	31,200	13,300,000	1,740,000	1,470,000	99,500	471,000
	Jun-21	37,300	192,000	19,900	4,340,000	891,000	619,000	47,000	239,000
	Jul-21	1,280	7,600	964	435,000	49,500	64,000	3,090	10,700
	Aug-21	56	370	38	22,400	3,260	5,880	89	459
	Sep-21	30	284	15	11,700	1,930	7,120	27	311
	Oct-21	32	293	29	12,400	3,690	5,790	76	369
	Nov-21	30	321	68	6,150	3,420	5,580	150	471
	Dec-21	1,000	6,630	858	145,000	46,000	73,800	1,930	8,560
2022	Jan-22	16,200	101,000	4,700	2,300,000	732,000	472,000	108,000	209,000
	Feb-22	5,750	46,300	2,210	795,000	524,000	460,000	43,800	90,000
	Mar-22	14,600	114,000	3,750	3,210,000	1,100,000	850,000	77,100	191,000
	Apr-22	21,600	142,000	6,930	4,400,000	1,030,000	821,000	58,600	200,000
	May-22	26,000	151,000	16,500	5,470,000	870,000	636,000	45,900	197,000
	Jun-22	5,800	32,300	4,750	1,720,000	217,000	220,000	11,400	43,700
	Jul-22	30	255	15	10,700	1,860	4,750	42	297
	Aug-22	48	487	47	15,200	4,680	14,000	67	554
	Sep-22	23	194	21	9,110	1,400	3,920	37	231
	Oct-22	1	12	0	658	82	390	0	12

Station ID WF1
Stream Name WEST FORK POINT REMOVE CREEK
Site Location CONWAY COUNTY, PEAR TREE RD BRIDGE CROSSING
Lat 35°26'50.87"N
Long 92°42'45.64"W

Monthly Loads at WF1

Year	Month	Total Phosphorus (lbs)	TKN (lbs)	Ammonia-Nitrongen (lbs)	TSS (lbs)	Sulfate (lbs)	Chloride (lbs)	NO3+NO2 Nitrogen (lbs)	Total Nitrogen (lbs)
2019	Nov-19	801	6,080	567	90,000	69,500	34,000	4,810	10,900
	Dec-19	545	4,560	220	56,100	47,900	21,500	3,960	8,510
2020	Jan-20	1,080	10,300	563	140,000	113,000	40,100	7,290	17,600
	Feb-20	552	6,430	345	84,800	73,400	32,900	5,460	11,900
	Mar-20	1,120	11,000	812	195,000	98,600	43,300	6,530	17,500
	Apr-20	976	9,440	689	169,000	75,800	30,800	2,900	12,300
	May-20	1,020	10,000	877	265,000	69,000	29,500	2,610	12,600
	Jun-20	399	4,000	414	75,700	19,700	8,990	654	4,650
	Jul-20	112	1,310	78	22,100	5,700	3,090	349	1,660
	Aug-20	23	263	29	2,350	1,420	864	134	397
	Sep-20	472	4,910	474	74,300	23,500	13,000	1,860	6,760
	Oct-20	21	249	16	2,060	1,810	958	52	301
	Nov-20	64	776	22	13,900	6,360	3,730	98	874
	Dec-20	107	1,300	71	20,100	14,600	8,160	626	1,920
2021	Jan-21	347	3,830	231	55,300	41,900	22,500	2,630	6,450
	Feb-21	132	1,270	67	21,400	20,200	10,100	1,130	2,400
	Mar-21	631	5,480	330	102,000	61,300	30,000	2,870	8,350
	Apr-21	230	2,540	145	39,600	26,700	13,100	681	3,220
	May-21	1,760	17,400	1,410	312,000	110,000	52,500	4,040	21,500
	Jun-21	1,140	10,300	555	224,000	62,400	30,800	1,420	11,700
	Jul-21	44	497	49	4,630	2,140	1,260	185	682
	Aug-21	22	209	17	1,630	1,320	758	144	353
	Sep-21	26	270	26	2,960	796	660	26	296
	Oct-21	21	230	20	1,950	930	555	13	242
	Nov-21	31	314	11	3,690	4,580	1,790	183	497
	Dec-21	115	1,770	29	19,300	8,680	4,790	222	1,990
2022	Jan-22	961	9,280	321	155,000	54,400	28,900	5,300	14,600
	Feb-22	420	4,620	189	62,600	48,400	27,600	3,210	7,830
	Mar-22	670	7,510	213	164,000	73,900	38,500	3,240	10,800
	Apr-22	1,020	8,710	535	124,000	83,700	40,800	2,300	11,000
	May-22	736	7,020	873	98,900	56,800	27,600	1,500	8,520
	Jun-22	41	387	25	7,580	2,430	1,330	125	512
	Jul-22	31	320	62	3,740	664	888	43	363
	Aug-22	32	342	92	2,400	506	825	20	362
	Sep-22	25	319	84	1,620	343	834	13	332
	Oct-22	1	17	1	58	17	58	1	18

Station ID WF2
Stream Name WEST FORK POINT REMOVE CREEK
Site Location CONWAY COUNTY, Bridge Hill RD BRIDGE CROSSING
Lat 35°26'6.59"N
Long 92°43'4.08"W

Monthly Loads at WF2

Year	Month	Total Phosphorus (lbs)	TKN (lbs)	Ammonia-Nitrogen (lbs)	TSS (lbs)	Sulfate (lbs)	Chloride (lbs)	NO3+NO2 Nitrogen (lbs)	Total Nitrogen (lbs)
2019	Nov-19	1,020	7,990	968	134,000	94,700	43,700	6,370	14,400
	Dec-19	660	5,810	640	69,200	65,500	28,900	4,750	10,600
2020	Jan-20	1,720	17,100	1,090	294,000	134,000	60,100	9,910	27,000
	Feb-20	959	10,500	693	202,000	131,000	63,400	11,700	22,200
	Mar-20	1,710	18,700	1,250	363,000	156,000	70,200	8,790	27,500
	Apr-20	1,430	13,200	830	288,000	112,000	47,400	4,300	17,500
	May-20	1,350	14,600	1,380	348,000	94,100	41,800	3,830	18,400
	Jun-20	472	4,180	407	85,500	24,800	11,600	1,040	5,220
	Jul-20	91	909	49	18,700	5,180	2,970	338	1,250
	Aug-20	14	158	11	1,850	1,270	723	89	247
	Sep-20	468	4,730	301	89,100	29,100	16,500	2,660	7,390
	Oct-20	14	261	12	2,780	2,670	1,660	136	397
	Nov-20	79	940	42	15,100	9,250	5,500	163	1,100
	Dec-20	190	1,920	140	36,700	22,300	12,500	1,080	3,010
2021	Jan-21	531	5,660	531	130,000	60,800	33,000	3,470	9,130
	Feb-21	243	2,090	108	40,000	32,700	16,200	1,600	3,690
	Mar-21	893	7,490	465	189,000	87,700	41,600	3,160	10,600
	Apr-21	767	5,620	473	122,000	50,200	27,300	1,140	6,760
	May-21	2,820	23,600	1,610	649,000	160,000	71,200	4,980	28,600
	Jun-21	1,620	15,000	1,210	391,000	84,300	42,500	3,680	18,700
	Jul-21	64	647	35	10,400	4,430	2,480	347	994
	Aug-21	25	218	15	2,530	1,540	963	140	358
	Sep-21	2	25	2	533	150	115	14	38
	Oct-21	5	91	4	1,560	630	424	27	118
	Nov-21	40	435	21	6,370	4,550	2,810	147	582
	Dec-21	154	2,220	117	32,600	12,600	7,570	600	2,820
2022	Jan-22	1,290	12,900	369	231,000	96,800	55,300	7,780	20,600
	Feb-22	588	5,900	338	98,000	72,800	40,100	3,930	9,830
	Mar-22	884	11,800	501	174,000	111,000	56,300	4,010	15,800
	Apr-22	1,420	11,800	594	243,000	128,000	60,900	3,040	14,900
	May-22	1,280	10,300	1,550	237,000	89,500	42,900	2,080	12,400
	Jun-22	82	614	46	11,500	4,350	2,320	272	886
	Jul-22	4	55	7	807	339	247	34	89
	Aug-22	4	56	7	804	318	307	16	72
	Sep-22	3	43	6	653	360	327	21	63
	Oct-22	0	0	0	1	0	0	0	0

Station ID WF3
Stream Name WEST FORK POINT REMOVE CREEK
Site Location POPE COUNTY, NEAR HWY 247 BRIDGE CROSSING AND USGS GAUGE
Lat 35°19'26.50"N
Long 92°52'22.15"W

Monthly Loads at WF3

Year	Month	Total Phosphorus (lbs)	TKN (lbs)	Ammonia-Nitrogen (lbs)	TSS (lbs)	Sulfate (lbs)	Chloride (lbs)	NO3+NO2 Nitrogen (lbs)	Total Nitrogen (lbs)
2019	Nov-19	4,390	33,000	2,880	501,000	311,000	201,000	48,500	81,500
	Dec-19	2,500	20,600	1,100	306,000	195,000	114,000	33,000	53,600
2020	Jan-20	5,560	49,300	2,980	869,000	409,000	241,000	65,100	114,000
	Feb-20	3,410	39,000	2,240	654,000	365,000	216,000	56,000	95,000
	Mar-20	8,310	59,500	4,580	1,940,000	461,000	269,000	63,000	123,000
	Apr-20	7,550	53,400	3,460	1,820,000	347,000	190,000	36,700	90,100
	May-20	6,280	47,200	3,110	1,400,000	254,000	150,000	25,900	73,100
	Jun-20	1,170	9,330	758	223,000	51,100	32,200	5,300	14,600
	Jul-20	187	1,600	139	25,200	8,450	6,840	729	2,330
	Aug-20	39	349	28	4,770	1,970	2,430	106	454
	Sep-20	3,140	21,100	1,570	419,000	101,000	101,000	12,200	33,300
	Oct-20	131	1,260	97	13,300	12,500	12,900	709	1,970
	Nov-20	320	4,130	193	41,100	44,000	40,600	2,020	6,150
	Dec-20	892	8,940	492	135,000	101,000	78,000	12,400	21,400
2021	Jan-21	3,410	25,400	1,460	514,000	268,000	193,000	40,600	66,000
	Feb-21	1,050	9,380	383	184,000	141,000	95,100	16,300	25,600
	Mar-21	4,940	37,700	1,700	1,450,000	326,000	204,000	35,200	72,900
	Apr-21	2,300	21,500	2,080	448,000	193,000	128,000	14,100	35,600
	May-21	21,200	122,000	7,080	4,670,000	628,000	371,000	56,600	178,000
	Jun-21	8,690	57,000	4,050	2,400,000	236,000	140,000	20,600	77,600
	Jul-21	285	2,600	187	38,400	17,200	12,200	1,390	3,990
	Aug-21	66	553	37	6,210	3,590	3,170	125	679
	Sep-21	5	45	3	716	190	343	9	54
	Oct-21	27	314	9	3,340	1,410	3,000	56	370
	Nov-21	34	433	12	4,180	2,450	3,220	21	454
	Dec-21	481	4,010	284	59,000	22,500	20,700	3,070	7,080
2022	Jan-22	5,700	45,800	2,140	802,000	293,000	208,000	61,700	108,000
	Feb-22	2,100	22,300	820	363,000	267,000	181,000	34,100	56,400
	Mar-22	5,300	43,900	2,310	970,000	374,000	236,000	36,100	80,000
	Apr-22	7,170	47,500	1,390	1,490,000	403,000	248,000	31,800	79,300
	May-22	5,400	30,600	2,540	1,090,000	282,000	168,000	22,000	52,500
	Jun-22	274	2,150	197	35,300	16,100	12,000	1,420	3,580
	Jul-22	9	82	8	943	352	622	24	106
	Aug-22	30	296	22	4,570	1,190	2,390	90	386
	Sep-22	5	46	4	764	172	347	10	57
	Oct-22	0	0	0	1	0	1	0	0

Station ID **WO**
Stream Name **White Oak Creek**
Site Location **POPE COUNTY, AT UNION GROVE RD BRIDGE CROSSING**
Lat **35°15'16.96"N**
Long **92°53'38.97"W**

Monthly Loads at WO

Year	Month	Total Phosphorus (lbs)	TKN (lbs)	Ammonia-Nitrongen (lbs)	TSS (lbs)	Sulfate (lbs)	Chloride (lbs)	NO3+NO2 Nitrogen (lbs)	Total Nitrogen (lbs)
2019	Nov-19	274	1,790	114	13,400	32,200	23,900	545	2,340
	Dec-19	71	489	48	3,710	12,800	12,100	188	677
2020	Jan-20	459	3,570	691	16,700	51,300	49,400	854	4,420
	Feb-20	283	2,320	210	30,600	31,600	29,300	784	3,100
	Mar-20	557	4,510	414	107,000	39,200	38,000	895	5,410
	Apr-20	486	2,670	312	49,400	33,400	36,600	649	3,320
	May-20	263	3,690	1,210	40,900	27,000	37,200	748	4,440
	Jun-20	58	499	31	6,720	10,600	15,100	259	758
	Jul-20	32	359	47	2,880	12,800	21,300	119	478
	Aug-20	822	3,940	3,280	6,230	3,350	25,300	159	4,090
	Sep-20	298	1,420	574	10,500	13,200	12,900	1,180	2,610
	Oct-20	1,080	3,310	15	9,740	1,400	17,000	43	3,350
	Nov-20	227	752	91	3,930	4,790	13,100	79	832
	Dec-20	137	752	194	5,830	12,900	10,800	278	1,030
2021	Jan-21	303	2,050	438	20,800	37,600	32,300	805	2,860
	Feb-21	235	1,810	162	32,900	34,900	33,800	599	2,410
	Mar-21	422	2,740	149	163,000	23,100	23,900	653	3,400
	Apr-21	165	1,390	151	17,500	24,900	35,100	593	1,980
	May-21	905	6,680	631	181,000	49,800	54,600	1,440	8,120
	Jun-21	382	2,490	860	74,800	16,000	23,900	625	3,120
	Jul-21	221	1,870	1,450	4,430	7,470	32,700	754	2,630
	Aug-21	80	440	74	1,320	5,090	45,100	351	791
	Sep-21	246	1,460	586	42,900	4,670	16,600	273	1,740
	Oct-21	140	720	291	2,410	6,220	11,100	637	1,360
	Nov-21	134	519	31	5,010	7,170	8,100	361	881
	Dec-21	1,040	3,380	1,580	13,600	7,720	16,800	243	3,620
2022	Jan-22	625	2,940	714	15,300	38,400	29,000	1,500	4,440
	Feb-22	296	2,040	641	17,300	34,000	36,700	756	2,800
	Mar-22	358	2,490	88	56,000	42,600	47,600	506	2,990
	Apr-22	467	3,530	182	107,000	33,200	34,500	505	4,030
	May-22	824	5,060	1,560	370,000	27,700	39,900	787	5,850
	Jun-22	851	4,540	2,760	18,600	11,800	46,000	1,170	5,710
	Jul-22	194	1,590	595	44,000	9,320	42,900	1,130	2,720
	Aug-22	129	1,030	371	6,490	11,200	21,800	901	1,930
	Sep-22	120	780	317	3,840	6,660	6,740	461	1,240
	Oct-22	1	50	26	104	162	247	1	52