INTRODUCTION

It is the intent of this Oklahoma Water Resources Board (OWRB) report to advance concepts and principles of the Oklahoma Comprehensive Water Plan (OCWP). Consistent with a primary OCWP initiative, this and other OWRB technical studies provide invaluable data crucial to the ongoing management of Oklahoma's water supplies as well as the future use and protection of the state's water resources. Oklahoma's decision-makers rely upon this information to address specific water supply, quality, infrastructure, and related concerns. Maintained by the OWRB and updated every 10 years, the OCWP serves as Oklahoma's official long-term water planning strategy. Recognizing the essential connection between sound science and effective public policy, incorporated in the Water Plan are a broad range of water resource development and protection strategies substantiated by hard data – such as that contained in this report – and supported by Oklahoma citizens.

Protecting Oklahoma's valuable water resources is essential to maintaining the quality of life for all Oklahomans. Used for a myriad of purposes—such as irrigation, hydropower, public/private water supply, navigation, and a variety of recreational activities—the state's surface and groundwater provides enormous benefits to Oklahoma from both an economic and recreational standpoint.

The National Recreation Lakes Study Commission (NRLSC) estimates that 32,100 people in Oklahoma are employed in support of activities related to our numerous man-made lakes. Also according to the NRLSC, 18,718,000 visitor days are spent on Oklahoma lakes each year and recreation in and around these lakes contributes approximately $2.2 billion each year to Oklahoma's economy. Of additional value are the recreational benefits associated with our smaller municipal/watershed projects, Oklahoma Department of Wildlife lakes, and rivers and streams throughout the state, which infuse millions into state coffers through fishing, hunting, camping and related activities. (In 1987, the Oklahoma Comprehensive Outdoor Recreation Plan estimated that approximately $10.7 million was realized through camping and $15.2 million through hunting/fishing.[1]) According to a 2001 federal study, fishing activities alone contribute $476,019 dollars to Oklahoma's economy, not including the substantial ancillary costs associated with that extremely popular sport.[2]

In addition to surface waters, abundant groundwater also fuels the state's economy serving as supply for thousands municipalities, rural water districts, industrial facilities, and agricultural operations. According to the 2012 update of the Oklahoma Comprehensive Water Plan (OCWP), groundwater represents the primary water supply for approximately 300 cities and towns and comprises 43 percent of the total water used in the state each year.[3] Groundwater resources also supply approximately 90 percent of the state's irrigation needs, and around 8% of Oklahoma's citizens obtain their drinking water from private wells.

Oklahoma works to protect and manage its water resources through a number of initiatives, with the Oklahoma Water Quality Standards (OWQS) serving as the cornerstone of the state's water quality management programs. The Oklahoma Water Resources Board (OWRB) is designated

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[1] Oklahoma Statewide Comprehensive Outdoor Recreation Plan (SCORP), 1987.
[2] U.S. Department of Interior, Fish and Wildlife Service, and U.S. Department of Commerce, U.S. Census Bureau. *2001 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation.*
[3] Oklahoma Water Resources Board, *Update of the Oklahoma Comprehensive Water Plan, 1995*.

by state statute as the agency responsible for promulgating water quality standards and developing or assisting the other environmental agencies with implementation framework. State agencies are responsible for implementing the OWQS as outlined by the OWRB through development of Implementation plans. Protecting our waters is a cooperative effort between many state agencies and because the OWQS are utilized by all agencies and represent a melding of both science and policy, they are an ideal mechanism to assess the effectiveness of our diverse water quality management activities.

The OWQS are housed in OAC 785:45 and consist of three main components: beneficial uses, criteria to protect beneficial uses, and anti-degradation policy. An additional component, which is not directly part of the OWQS but necessary to water resource protection, is a monitoring program. A monitoring program is required in order to ensure that beneficial uses are maintained and protected. If uses are not being maintained, the cause of that impairment must be identified and restoration activities should be implemented to improve water quality such that it can meet its assigned beneficial uses.

All state agencies are currently required to implement Oklahoma's Water Quality Standards within the scope of their jurisdiction through the development of an Implementation Plan specific for their agency. This process, called OWQS Implementation, allows the OWQS to be utilized by other state agencies in the performance of their regulatory (statutory) responsibilities to manage water quality or to facilitate best management practice initiatives.

In the late 1990's, the need for a protocol to determine beneficial use impairment was identified, which would facilitate state agencies in directing their time and money to the areas in most need of protection or remediation. The OWRB, working in close concert with other state environmental agencies and other concerned parties developed Use Support Assessment Protocols (USAP) to be used by all parties for assessing if a water body was meeting its assigned beneficial uses. In addition, protocols were developed which could be coupled with a trend monitoring system to detect threatened waters before they become seriously impaired. Data collection efforts connected with protocol development and/or implementation also serves a vital purpose in refining numerical criteria currently included in the OWQS and in developing appropriate numerical and narrative criteria for future OWQS documents. It is essential that our waters meet assigned uses and that OWQS implementation protocols are appropriate. Please see the OWRB website for the applicable Oklahoma Administrative Code OAC 785:46 related to the USAP. Final approval of the USAP occurred in 2000 and the OWRB has constantly worked to refine the existing protocols and pursue the addition or modification of USAP protocols to further enhance its utility and effectiveness.

Work to be performed towards development and implementation of the critical fourth component of the OWQS program, monitoring, is the subject of this report. All sampling activities described and conducted as part of this program were consistent with the Oklahoma USAP. It is also important to note that they are consistent with Environmental Protection Agency (EPA) reporting requirements for the "*Integrated Water Quality Monitoring and Assessment Report"*, §319 Nonpoint Source (NPS) Assessment, and the §314 Lake Water Quality Assessment (LWQA).

Background & Problem Definition

The State of Oklahoma has historically had numerous monitoring programs conducted by several state and federal agencies. In general, each environmental agency conducts their monitoring programs with some degree of integration and coordination with other state,

municipal, or federal programs. Most water quality monitoring programs in Oklahoma are designed and implemented by each agency to collect information for one specific purpose or project (i.e. development of Total Maximum Daily Loads, OWQS process, lake trophic status determination, water quality impacts from point source dischargers, stream flow measurements, document success of best management practices, etc.). Information of this type is very specific to each individual project's data quality objectives (DQOs) and is often limited to a very small geographic area. This document describes sampling activities the OWRB has historically conducted on lakes and efforts that are currently on going on lakes and streams across Oklahoma as part of a comprehensive, long-term, statewide Beneficial Use Monitoring Program (BUMP). The goal of the BUMP is to detect and quantify water quality trends, document and quantify impairments of assigned beneficial uses, and identify pollution problems before they become a pollution crisis.

The state is taking a major step towards coordinating sampling activities with the creation of a "Water Quality Monitoring Council" comprised of representatives from state, local, and federal agencies as well as universities, industries, volunteer groups, Indian tribes, and environmental organizations. This Council as envisioned would serve a useful purpose in providing an avenue for communication between the various groups and will allow the state to coordinate water quality monitoring in a more effective manner. The Council will focus on coordinating agency activities and help the state avoid duplication of effort. Coordination between all concerned parties is obviously essential, but a comprehensive basic monitoring initiative to support the OWQS implementation process must be pursued to identify waters which are not meeting their assigned beneficial uses and thus ensure that Oklahoma's water resources are protected from water quality degradation. The Council will also be pivotal in ensuring consistency between data collection efforts. The Monitoring Council will function in a coordinating capacity, which will maximize monitoring efforts.

Beneficial Use and Monitoring Program Overview

The overall goal of the Beneficial Use Monitoring Program is to document beneficial use impairments, identify impairment sources (if possible), detect water quality trends, provide needed information for the OWQS, and facilitate the prioritization of pollution control activities.

Beneficial Use Monitoring Program Components

- **Monitoring Rivers & Streams** - The OWRB is currently monitoring approximately eighty-four (84) stations six times annually. Fixed station monitoring is based largely upon the eighty-four (84) planning basins as outlined in the Oklahoma Comprehensive Water Plan (OCWP). In general, at least one (1) sample station was located at the terminal end of each of the planning basins. The OWRB also conducts on-going special studies as well as 25-30 probabilistic monitoring stations annually.
- **Fixed Station Load Monitoring** - The OWRB is currently working with several partners including the the USGS, US Army Corp of Engineers, Grand River Dam Authority, and National Weather Service to conduct flow monitoring on all of our fixed station sites that are not part of the Oklahoma/USGS Cooperative Gaging Network. This cooperative effort will allow for loadings to be calculated, trends to be assessed statewide, and provide much needed data for the Use Support Assessment process. Along with the USGS cost share program, Oklahoma's 319 program, Oklahoma's 314 program and the 303(d)-process will drive sample site locations associated with this task.

- **Fixed Station Lakes Monitoring** - As part of the Beneficial Use Monitoring Program, the Oklahoma Water Resources Board (OWRB) conducts sampling on lakes and reservoirs across the State of Oklahoma. To accomplish this task, the OWRB has taken a probabilistic survey approach for the lakes monitoring program. This survey design allows the state's objectives to be met as well as ensure various sized water bodies are represented adequately. The survey population includes all lakes above 50 surface acres, which encompasses approximately 206 different water bodies. The population is then stratified into two groups – lakes greater than 500 surface acres and those below 500 surface acres. The greater than 500 surface acres group includes 68 lakes, of which approximately one-fifth are monitored annually (quarterly samples) on a randomized draw. They are then monitored again during a subsequent year in the 5-year rotation, so that each lake greater than 50 surface acres is sampled 2 non-consecutive years during each 5 year rotation. The lakes managed by our Federal partners, the USACE and Bureau of Reclamation (BoR) are included in the 68 large lakes. Additionally, ten randomly drawn lakes of less than 500 surface acres are sampled annually (quarterly samples) over the 5 year sample frame. Many of these smaller lakes have not been sampled historically through the BUMP program and include small municipal water supplies.

  The OWRB works with other agencies, such as the US Army Corps of Engineers (USACE), for inclusion of additional information on water bodies managed by the Corps. Data collected consists primarily of water chemistry, nutrients, and chlorophyll-a information. In general, a minimum of three to five stations per reservoir is sampled depending on the size of the reservoir. Stations are located such that they represent the lacustrine, transitional, and riverine zones of the lake. On many reservoirs, additional sites are monitored, including major arms of the reservoir as appropriate. Water quality parameters have been added to the lakes sampling effort over the years to enhance program ability to make use support determinations.

- **Groundwater Monitoring and Assessment Program (GMAP)** – This new program was made possible as result of a $1,500,000 increase in funding received from the Oklahoma Legislature for water quality/quantity monitoring based on recommendations of the 2012 Update of the Oklahoma Comprehensive Water Plan. These additional monies were utilized to restore funding levels of the Beneficial Use Monitoring Program as well as to implement the new groundwater program. The new groundwater program prioritizes efforts on Oklahoma's 21 major groundwater aquifers and will continue to be phased in over the next 3 years. This baseline period will focus on 4-6 aquifers per year and will assess concentrations of nutrients, metals and major ion species. Water quality data will be collected from networks of wells on the basis of an aquifer's areal extent. This design feature generated sample populations of at least 30 wells for each of Oklahoma's 15 largest aquifers. Smaller aquifers are represented by fewer wells but proportionally have more sites per areal extent (Table 1).

Table 1. Sample Networks Based on Aquifer Areal Extent.

Areal Extent Category	Sample Site Well Density	Sample Sizes Generated
> 5000 km^2	1 well per 150 km^2 (6 Aquifers)	37 – 89
3001 – 5000 km^2	1 well per 100 km^2 (5 aquifers)	33 – 48
1501 – 3000 km^2	1 well per 75 km^2 (6 aquifers)	25 – 33
751 – 1500 km^2	1 well per 50 km^2 (2 aquifers)	16 – 19
≤ 750 km^2	2 aquifers	6 – 10

In the first year of sampling, 203 wells in 6 major aquifers were sampled for water quality and 299 wells for water level. When fully implemented, there will be 750 wells in the statewide groundwater quality network statewide. In addition, the OWRB's annual groundwater level measurement program will be doubled in capacity (from around 530 to 1100 wells) and will be spatially redistributed. Work began on expanding the groundwater level measurement program in January 2014 with the addition of 87 new wells to the program. For one-half of the water level network, manual measurements will become tri-annual events. In January 2014, 110 wells were added to the tri-annual measurement network. Additionally, over the 4-year baseline period, the OWRB plans to install 30-50 continuous water level recorders to obtain daily or hourly measurements that are more sensitive to detecting seasonal changes (brought on by drought or variable climate conditions) than can be obtained by annual measurements. Sixteen continuous water level recorders were installed in 8 aquifers across the state for this purpose in the first year of sampling.

- **Intensive Investigations** - If beneficial use impairment is identified or suspected, then all appropriate state agencies will be alerted and an investigation will be initiated to confirm if beneficial use impairment is occurring. If routine monitoring cannot definitively identify impairments, then an intensive study will be undertaken and if impairment is present, the source of the impairment will be identified, if possible. For example, monies could be spent to identify if high turbidity readings in rivers and streams are due to natural processes or do to human activities in the watershed of concern. Some potential causes of beneficial use impairment are; improper beneficial use or criteria (Oklahoma Water Resources Board jurisdiction), point source problems (Oklahoma Department of Environmental Quality or Oklahoma Department of Agriculture), non-point source problems (Oklahoma Conservation Commission, Oklahoma Department of Agriculture, Oklahoma Corporation Commission, or Oklahoma Department of Environmental Quality), oil and gas contamination (Oklahoma Corporation Commission), agricultural activities (Oklahoma Department of Agriculture), or mining activities (Oklahoma Department of Mines). All monitoring activities will be cooperative in nature with the agency with statutory authority assuming the lead role for intensive monitoring. If water bodies are not identified for intensive study as part of this task, then monies will be reallocated for routine monitoring of beneficial use attainment. Other entities (i.e. tribal or governmental units outside of Oklahoma) will be involved as appropriate. All intensive-monitoring activities will be consistent with the OWQS and the USAP. If no protocols exist, then best professional judgment or State/Environmental Protection Agency guidance is used as appropriate.

EXECUTIVE SUMMARY

It is the intent of this Oklahoma Water Resources Board (OWRB) report to advance concepts and principles of the Oklahoma Comprehensive Water Plan (OCWP). Consistent with a primary OCWP initiative, this and other OWRB technical studies provide invaluable data crucial to the ongoing management of Oklahoma's water supplies as well as the future use and protection of the state's water resources. Oklahoma's decision-makers rely upon this information to address specific water supply, quality, infrastructure, and related concerns. Maintained by the OWRB and updated every 10 years, the OCWP serves as Oklahoma's official long-term water planning strategy. Recognizing the essential connection between sound science and effective public policy, incorporated in the Water Plan are a broad range of water resource development and protection strategies substantiated by hard data – such as that contained in this report – and supported by Oklahoma citizens.

Beneficial Use Monitoring Program Goal

The goal of the Beneficial Use Monitoring Program is to document beneficial use impairments, identify impairment sources (if possible), detect water quality trends, provide needed information for the OWQS and facilitate the prioritization of pollution control activities.

The Beneficial Use Monitoring Program exists as a result of the vital economic and social importance of Oklahoma's lakes, streams, wetlands, and aquifers and the associated need for their protection and management. The data contained in this report is scientifically defensible and has been collected and analyzed following procedures outlined in Use Support Assessment Protocols (USAP), developed by Oklahoma's environmental agencies. Specifically, USAPs establish a consistent method to determine if beneficial uses assigned for individual waters through Oklahoma Water Quality Standards (OWQS) are being supported. (Legitimacy of data analyzed following protocols other than those outlined in the USAP must be defended.) If the BUMP report indicates that a designated beneficial use is impaired, threatened, or otherwise compromised, measures must be taken to mitigate or restore the water quality.

Traditionally, the State of Oklahoma has utilized numerous water monitoring programs conducted by individual state and federal agencies. In general, each environmental agency designs and implements its own program with only limited participation from with other state, municipal, or federal entities. These programs collect information for a specific purpose or project (e.g., development of Total Maximum Daily Loads, OWQS process, lake trophic status determination, water quality impact assessments from nonpoint and point source pollution, stream flow measurement, assessment of best management practices, etc.). Therefore, the information is specific to each project's data quality objectives (DQOs) and is often limited to a very small geographic area.

To synchronize Oklahoma's monitoring efforts related to water quality, the State Legislature appropriated funds in 1998 to create the Beneficial Use Monitoring Program under the direction of the Oklahoma Water Resources Board, who maintains Oklahoma's Water Quality Standards. The BUMP brings the OWRB's overall water quality management program full circle. From the promulgation of OWQS, to permitting and enforcement of permits stemming from OWQS-established criteria, to non-point source controls—all agency water quality management

activities are intended to work in concert to restore, protect, and maintain designated beneficial uses.

The specific objectives of the BUMP are to detect and quantify water quality trends, document and quantify impairments of assigned beneficial uses, and identify pollution problems before they become a pollution crisis. This report interprets current Oklahoma lake and stream data collected as part of the comprehensive, long-term program.

Beneficial Use Monitoring Program Components

- **Monitoring Rivers & Streams** - The OWRB is currently monitoring approximately eighty-four (84) stations six times annually. Fixed station monitoring is based largely upon the eighty-four (84) planning basins as outlined in the Oklahoma Comprehensive Water Plan (OCWP). In general, at least one (1) sample station was located at the terminal end of each of the planning basins. The OWRB also conducts on-going special studies as well as 25-30 probabilistic monitoring stations annually.

- **Fixed Station Load Monitoring** – The OWRB is currently working with several partners including the USGS, US Army Corp of Engineers, Grand River Dam Authority, and National Weather Service to conduct flow monitoring on all of our fixed station sites that are not part of the Oklahoma/USGS Cooperative Gaging Network. This cooperative effort will allow for loadings to be calculated, trends to be assessed statewide, and provide much needed data for the Use Support Assessment process.

- **Fixed Station Lakes Monitoring** - As part of the Beneficial Use Monitoring Program, the Oklahoma Water Resources Board (OWRB) conducts sampling on lakes and reservoirs across the State of Oklahoma. To accomplish this task, the OWRB has taken a probabilistic survey approach for the lakes monitoring program. This survey design allows the state's objectives to be met as well as ensure various sized waterbodies are represented adequately. The survey population includes all lakes above 50 surface acres, which encompasses approximately 206 different waterbodies. The population is then stratified into two groups – lakes greater than 500 surface acres and those below 500 surface acres. The greater than 500 surface acres group includes 68 lakes, of which approximately one-fifth are monitored annually (quarterly samples) on a randomized draw. They are then monitored again during a subsequent year in the 5-year rotation, so that each lake greater than 50 surface acres is sampled 2 non-consecutive years during each 5 year rotation. The lakes managed by our Federal partners, the USACE and Bureau of Reclamation (BoR) are included in the 68 large lakes. Additionally, ten randomly drawn lakes of less than 500 surface acres are sampled annually (quarterly samples) over the 5 year sample frame. Many of these smaller lakes have not been sampled historically through the BUMP program and include small municipal water supplies.

  The OWRB works with other agencies, such as the US Army Corps of Engineers (USACE), for inclusion of additional information on waterbodies managed by the Corps. Data collected consists primarily of water chemistry, nutrients, and chlorophyll-a information. In general, a minimum of three to five stations per reservoir is sampled depending on the size of the reservoir. Stations are located such that they represent the lacustrine, transitional, and riverine zones of the lake. On many reservoirs, additional sites are monitored, including major arms of the reservoir as appropriate. Water quality parameters have been added to

the lakes sampling effort over the years to enhance program ability to make use support determinations.

Groundwater Monitoring and Assessment Program (GMAP) – This new program was made possible as result of the increase in funding received from the Oklahoma Legislature for water quality/quantity monitoring based on recommendations of the 2012 Update of the Oklahoma Comprehensive Water Plan. These additional monies were utilized to restore funding levels of the Beneficial Use Monitoring Program as well as to implement the new groundwater program. The new groundwater program prioritizes efforts on Oklahoma's 21 major groundwater aquifers and will continue to be phased in over the next 3 years. This baseline period will focus on 4-6 aquifers per year and will assess concentrations of nutrients, metals and major ion species. Sample size was predicated upon and proportional to the surface area of the aquifer with a general goal of 30 wells per aquifer. Some of the state's larger aquifers exceeded the goal and some of the smaller aquifers were represented by fewer wells Table 1. Sample Networks Based on Aquifer Areal Extent.

Areal Extent Category	Sample Site Well Density	Sample Sizes Generated
> 5000 km^2	1 well per 150 km^2 (6 aquifers)	37 – 89
3001 – 5000 km^2	1 well per 100 km^2 (5 aquifers)	33 – 48
1501 – 3000 km^2	1 well per 75 km^2 (6 aquifers)	25 – 33
751 – 1500 km^2	1 well per 50 km^2 (2 aquifers)	16 – 19
≤ 750 km^2	2 aquifers	6 – 10

When fully implemented, there will be 750 wells in the statewide groundwater quality network statewide. In addition, the OWRB's annual groundwater level measurement program will be doubled in capacity from around 530 to 1100 wells and will be spatially redistributed. Also over the 5-year baseline period, the OWRB plans to install 30-50 continuous water level recorders to obtain daily or hourly measurements that are more sensitive to detecting seasonal changes (brought on by drought or variable climate conditions) than can be obtained by annual measurements.

- **Intensive Investigations** - If beneficial use impairment is identified or suspected, then all appropriate state agencies will be alerted and an investigation will be initiated to confirm if beneficial use impairment is occurring. If routine monitoring cannot definitively identify impairments, then an intensive study will be undertaken and if impairment is present, the source of the impairment will be identified if possible. One potential use for the intensive studies envisioned was identified during the data analysis phase of this reporting process. For example, monies could be spent to identify if high turbidity readings in rivers and streams are due to natural processes or do to human activities in the watershed of concern. Some potential causes of beneficial use impairment are; improper beneficial use or criteria (Oklahoma Water Resources Board jurisdiction), point source problems (Oklahoma Department of Environmental Quality or Oklahoma Department of Agriculture), non-point source problems (Oklahoma Conservation Commission, Oklahoma Department of Agriculture, Oklahoma Corporation Commission, or Oklahoma Department of Environmental Quality), oil and gas contamination (Oklahoma Corporation Commission), agricultural activities (Oklahoma Department of Agriculture), or mining activities (Oklahoma Department of Mines). All monitoring activities will be cooperative in nature with the agency with statutory authority assuming the lead role for intensive monitoring. If water bodies are not identified for intensive study as part of this task, then monies will be reallocated for routine monitoring of beneficial use attainment. Other entities (i.e. tribal or governmental units outside of Oklahoma) will be involved as appropriate. All intensive-monitoring activities will

be consistent with the OWQS and the USAP. If no protocols exist, then best professional judgment or State/Environmental Protection Agency guidance is used as appropriate.

Program History/Overview

Sampling of the numerous lakes, streams, and rivers across this state was initiated in the summer and fall of 1998. Lake sampling in connection with the Beneficial Use Monitoring Program began in July of 1998. Sampling on numerous streams and rivers began in earnest in November of the same year. The two sampling programs, one for lakes and one for streams had separate starting dates for a number of reasons. First, the OWRB has been conducting a lake-sampling program during the warmer summer months since 1990 as part of the Federal Clean Lakes Program. This historical lake sampling program was funded through federal dollars with the express purpose of determining lake trophic status. The trophic status of a reservoir can range from oligotrophic (low biological productivity) to hyper-eutrophic (excessive biological productivity). In general, the more productive a reservoir, the more water quality problems it is likely to experience. Federal dollars to fund this trophic state assessment of our state's lakes were discontinued in 1994. At that time, the OWRB searched for other funding sources, and through working with the Secretary of the Environment and the Oklahoma Conservation Commission, the Water Board was able to obtain a onetime federal 319 nonpoint source grant to continue the lake trophic state assessment program. The OWRB subsequently initiated a quarterly lake sampling program in the spring of 1998 and was able to roll the existing lake program into the BUMP.

For streams, no such comprehensive, statewide sampling effort was ongoing at the time the BUMP was funded. Because of this, the OWRB required a number of months to re-allocate staff and implement a monitoring regime on streams. In addition, OWRB staff greatly desired input from the other environmental agencies on the placement of stream monitoring stations. The existence of a previous statewide stream-monitoring network greatly aided in sample site selection. This historical ambient trend stream-monitoring network existed from 1975 until 1993 and was implemented by the Oklahoma State Health Department. Although this program did not evaluate sample results through comparison with the OWQS criteria or determine use support, it did provide a framework upon which to build. The historical sampling network sampled streams on a monthly basis from 1975-1986 and on a semi-annual basis from 1987-1993. Based upon the historical program and input from other agencies, the OWRB has established an ambient monitoring network of 100 active permanent stations with numerous rotational sites. Both the permanent and rotational networks are evaluated annually to determine if any stations should be dropped and others added. The Water Resources Board relies heavily on the other state and federal agencies for input into this process. In addition, monitoring personnel with the OWRB work closely with the other state environmental agencies to avoid duplication of sampling effort (i.e. the Oklahoma Conservation Commission rotating and data gaps sampling initiatives), except on a very limited basis for quality assurance purposes. A very small number of sites that are duplicative in nature do allow for the comparison of results between sampling programs to ensure that sampling protocols and the Use Support Assessment Protocols (USAP - described below) are working effectively and that decisions on support status are being made in a consistent manner.

The OWRB has developed Use Support Assessment Protocols (USAP) for lakes and streams, which are essential if the state is to be consistent in identifying waters that are not meeting their assigned beneficial uses or are threatened. The Water Resources Board has incorporated the USAP into Oklahoma Administrative Code (OAC) 785:46 to ensure that consistent determinations for impairments are made by all of the monitoring agencies.

The state must follow consistent procedures for listing waters as impaired. Using the OWRB Use Support Assessment Protocols, it was possible for OWRB staff to assess whether threats or impairments are present in our waterways. With continued funding, identification of impaired waters will be accomplished on additional waters.

Results of Sampling Efforts

It is essential that Oklahoma quantify impacts in a comprehensive and scientific manner and look for trends in water quality to identify waters that are not meeting their assigned beneficial uses. As a state, we must manage our water resources effectively and direct money to areas in most need of protection or remediation to ensure that we continue to have good quality and sufficient quantity of water to meet our needs well into the 21st century. Comprehensive statewide data sets on rivers, streams and lakes for accurately assessing beneficial use impairments have not existed since 1993. With the implementation of monitoring on a large scale in October of 1998, this is no longer the case. With the availability of data, it is the desire of the Oklahoma Water Resources Board to provide the legislature and professional water managers with a comprehensive and up-to-date document for their review and approval. Administrative and Technical staff at the OWRB look forward to conducting the Beneficial Use Monitoring Program far into the future and providing the state of Oklahoma with the information it needs to make informed decisions that allow us to effectively manage our precious water resources.

Every two years, the OWRB analyzes data collected by BUMP and that data are used to identify if the waters of the state are meeting their assigned beneficial uses. If the stream/river segment is not meeting its beneficial use it is submitted for inclusion on the EPA's 303d list. The latest EPA approved 303d list of impaired waters can be found on the Oklahoma Department of Environmental Quality's website. Oklahoma's 303d list

STREAM MONITORING PROGRAM

The Stream Beneficial Use Monitoring Program (BUMP) was initiated in November of 1998. BUMP streams staff began collecting monthly data in November of 1998 and throughout the years has changed from monthly sampling to bi-monthly sampling depending on program needs. Beginning in 2017, an eight-week sampling cycle was implemented. Each stream station is described individually with information outlining the site location and other pertinent information followed by a brief synopsis of data results. All of the sites are listed at this hyperlink, current permanent monitoring sites.

River and Stream Monitoring HISTORIC Overview

Historically, the collection of data on rivers and streams across the state has been inconsistent. Over the years, various local, tribal, state, and federal agencies managed a number of sampling programs for different purposes. These programs have varied in nature ranging from site-specific, short-term monitoring to broad, statewide sampling, such as the one conducted by the former Oklahoma State Department of Health (OSDH). When OSDH stopped their monthly sampling program in 1989 it created a void in the dataset and the need for a new, comprehensive, statewide ambient trend monitoring program. In addition, Oklahoma lacked a program with the specific capability of documenting statewide beneficial use impairments on a long-term basis. The Beneficial Use Monitoring Program (BUMP) was created to fulfill these goals. By establishing a monitoring network that evaluates general water quality through the use of an existing framework like the Oklahoma Water Quality Standards (OWQS), the state of Oklahoma initiated a progressive phase in the long-term assessment of the overall health of our state's streams and rivers.

Materials & Methods

The Monitoring Network: The BUMP rivers and streams network consists of three major station classifications — permanent ambient trend, rotating, and statistical survey sites. Permanent ambient trend monitoring stations are relatively static within the program. In general, they do not change from year to year and were chosen to allow for long-term assessment of beneficial uses and water quality trends. Since program inception, a small number of sites have been dropped and new sites have been added to more effectively assess the water quality of our major stream basins. Statistical survey stations are selected at random every two years and visited once or twice during biological index periods. Rotating stations are selected for specific purposes and typically have a finite lifespan.

With the creation of the permanent monitoring network, OWRB staff established three overarching objectives for the program.

First, the network must encompass the entire state. To accomplish this, a commitment was made to locate at least one site in each of the 8-digit USGS hydrologic units (HUC; Table 1) (Map).

Table 1. Eight Digit United States Geological Survey HUC Watersheds.

8 Digit HUC Number	Description	8 Digit HUC Number	Description
11040001	Cimarron Headwaters	**11100301**	Middle North Canadian
11040002	Upper Cimarron	**11100302**	Lower North Canadian
11040006	Upper Cimarron – Liberal	**11100303**	Deep Fork
11040007	Crooked	**11110101**	Polecat – Snake
11040008	Upper Cimarron – Bluff	**11110102**	Dirty – Greenleaf
11050001	Lower Cimarron – Eagle Chief	**11110103**	Illinois
11050002	Lower Cimarron – Skeleton	**11110104**	Robert S. Kerr Reservoir
11050003	Lower Cimarron	**11110105**	Poteau
11060001	Kaw Lake	**11120105**	Lower Prairie Dog Town Fk., Red
11060002	Upper Salt Fork – Arkansas	**11120202**	Lower Salt Fork – Red
11060003	Medicine Lodge	**11120302**	Middle North Fork – Red
11060004	Lower Salt Fork – Arkansas	**11120303**	Lower North Fork – Red
11060005	Chickaskia	**11120304**	Elm Fork – Red
11060006	Black Bear – Red Rock	**11130101**	Groesbeck – Sandy
11070103	Middle Verdigris	**11130102**	Blue – China
11070105	Lower Verdigris	**11130201**	Farmers – Mud
11070106	Caney	**11130202**	Cache
11070107	Bird	**11130203**	West Cache
11070205	Middle Neosho	**11130208**	Northern Beaver
11070206	Grand Lake	**11130210**	Lake Texoma
11070207	Spring	**11130301**	Washita Headwaters
11070208	Elk	**11130302**	Upper Washita
11070209	Lower Neosho	**11130303**	Middle Washita
11090103	Rita Blanca	**11130304**	Lower Washita
11090201	Lower Canadian – Deer	**11140101**	Bois D'Arc – Island
11090202	Lower Canadian – Walnut	**11140102**	Blue
11090203	Little	**11140103**	Muddy Boggy
11090204	Lower Canadian	**11140104**	Clear Boggy
11100101	Upper Beaver	**11140105**	Kiamichi
11100102	Middle Beaver	**11140106**	Pecan – Waterhole
11100103	Coldwater	**11140107**	Upper Little
11100104	Palo Duro	**11140108**	Mountain Fork
11100201	Lower Beaver	**11140109**	Lower Little
11100203	Lower Wolf		

Second, the foundation of the monitoring network should focus on the state's largest rivers, the Arkansas River and the Red River, and their major tributaries, such as the Canadian River and the Washita River. Consideration was given to the major tributaries of rivers such as the Canadian River and the Little River. Further consideration was also given to areas of the state (e.g., the Panhandle) that were underrepresented as well as rivers and streams (e.g., the Deep Fork River) that were conspicuously missing from the network.

Third, the advice and input of other state environmental agencies and professionals was sought before making a final determination of permanent monitoring station locations. In particular, the Oklahoma Department of Environmental Quality (ODEQ) and the Oklahoma Conservation Commission (OCC) have been, and continue to be very helpful in assisting with locating permanent stations.

Operating within these overarching objectives, the staff of the OWRB selected and performed monitoring on 130 permanent ambient trend monitoring sites since September of 1998. Beginning in January 2013, the OWRB adjusted the monitoring network to more closely align with the needs of the Oklahoma Comprehensive Water Plan. The goal was to put a permanent station at the outflow of all 82 water planning basins (Map), while maintaining a small network of reference condition sites. Along with the redesigned network, the frequency of sampling was increased from 6 samples per year to 8 samples per year.

The placement of a site location necessitates several considerations. First, a site must be accessible by vehicle and be safe for sampling personnel and other motorists. Second, the site must be located in an area where representative data can be acquired. The OWQS Use Support Assessment Protocols (USAP) sets spatial limitations on the data that is collected. Essentially, a site can only represent twenty-five stream miles for non-wadeable streams and ten stream miles for wadeable streams (with some exceptions). Furthermore, a site can only be representative of the water body identification number (12-digit HUC number) in which it is located and the site cannot be located within a regulatory mixing zone. This requires monitoring sites be selected in a way which represents as long a stream reach as possible while still maintaining the spatial integrity outlined in USAP. Thirdly, it is important that historical data be considered. Many of the BUMP permanent monitoring sites were selected from a set of historical stations which were previously used in the OSDH statewide monitoring program (when OSDH dissolved it became part of the ODEQ Ambient Trend Monitoring Program). Before initial sampling began in 1998, OWRB staff worked closely with the ODEQ to integrate many of the historical sites into BUMP. Although the historical data from these sites cannot be used to assess beneficial uses (USAP sets a temporal limitation of five years), the historical data set benefits the state in assessing long-term water quality trends. Lastly, it is imperative that rivers and streams which have been designated in the OWQS as Outstanding Resource Waters (ORW), High Quality Waters (HQW), or Sensitive Water Supplies (SWS) be given unique consideration even if they do not meet the objectives as outlined. The water quality status of each site is discussed in more detail in the individual site pages.

The goal of the rotating portion of the program is to provide short-term assessments on priority waters as identified by a state agency or other party. Two general objectives were identified to aid in the determination of what would qualify as a rotating site. First, it should be determined that data collection at a particular site should be short-term in nature and not extend past one sampling year, although some stations do remain in the network for up to two years. Data collected within that year should allow water quality managers to make the appropriate decisions regarding the segment being monitored. For instance, if a stream reach is listed as impaired on the 303(d) list due to pH, measuring pH throughout one year should allow the requesting agency or entity to either de-list the segment or determine what other monitoring efforts are necessary. Secondly, the monitoring should fall within the framework of the USAP. Since the inception of the program, the staff of OWRB has met individually with representatives of other state agencies to identify their priority short-term monitoring needs. Once the OWRB receives a list of waters for monitoring from the interested agencies, staff evaluates the nominations and notifies the nominating agency of which waters would be monitored (to date, all of the waters requested for monitoring have been accommodated). In all, over 220 monitoring stations have been or are currently being monitored. In most instances, the segments were listed for one or more variables on the state's 303(d) list. For a comprehensive list of historic and/or current rotational monitoring stations, please contact the Oklahoma Water Resources Board/Water Quality Programs Division at (405) 530-8800.

Statistical survey monitoring is a unique study design for which monitoring stations across the state are selected at random. The OWRB has been actively involved in this type of monitoring since 2004. The latest probabilistic data report is titled "Statewide Stream/River Probabilistic Monitoring Network for the State of Oklahoma from 2008-2011" and can be found under "Water Quality Monitoring" on the reports page of the OWRB website at www.owrb.ok.gov/reports.

Stream Monitoring Variables: The variables being monitored were chosen to reflect both objectives of the programs — assessment of beneficial uses within the framework of USAP as well as the assessment of general water quality. Even though a variable may not be listed in the OWQS with a specific criterion (e.g., hardness), the variable is an important constituent in analyzing and understanding the general water quality of a particular segment. See Table 2 for a list of monitoring variables.

Data for general water quality, nutrient, metals, organics, chlorophyll-a, and bacteriological variables are collected in one of two ways. Some variables are monitored in-situ utilizing a YSI or EXO multi-probe instrument. The data are uploaded from the instrument to a data logger, transferred manually to a field log sheet, and downloaded to the OWRB monitoring database. These variables include dissolved oxygen (D.O.), %D.O. saturation, water temperature, pH, salinity, total dissolved solids, and specific conductance. Data for all other variables are gathered from water quality samples collected at the station. When the flow of a channel is approximately 1.5 ft/s or greater, samples are collected using a depth-integrated method. Samples at non-wadeable sites are collected by lowering a depth-integrated sampler (DH-95 with polyethylene collection bottle) from a bridge, through the water column at equal width increments across the channel. Samples at wadeable sites are collected with a DH-81 wadeable depth-integrated sampler (polyethylene collection bottle) through the water column at equal width increments. When the flow of the channel is less than 1.5 ft/s, a grab composite sample is collected. Non-wadeable sites are collected by lowering a weighted bottle sampler with a 1-L bottle under the surface of the channel. Wadeable sites are collected using a whirl-pak inside of a 1-L collection bottle and submerging the bottle under the water. Equal width increments are used in both wadeable and non-wadeable sites to get an accurate representation of the channel. Grab samples are conducted if the channel is a series of

disconnected pools. If sampling occurs from a bridge, the sampling typically is done on the down-stream side of the bridge. The sampling methods used are described in detail in the Collecting Water Quality Samples SOP. From this water sample, water quality variables are monitored in several ways. For laboratory analysis of general water quality variables and nutrients, water is aliquoted, as outlined in the SOP, into two, 1L bottles (one for sulfuric acid/ice preservation and one for ice preservation). If a metals analysis is necessary, water is collected at the thalwag of the channel into a 250mL bottle and preserved with nitric acid for a total recoverable metals panel, or filtered and preserved with nitric acid for a dissolved metals panel, as per standard operating procedures guidelines. Sample water for the determination of nephelometric turbidity, total hardness, and total alkalinity is also aliquoted from the remainder of the general chemistry sample water. Nephelometric turbidity is determined through use of a HACH portable turbidimeter. Total hardness and alkalinity are determined using HACH test kits. All instruments and test kits are calibrated and used according to manufacturer's instructions. Sestonic chlorophyll-a samples are also collected from the composited water sample and are filtered through a glass fiber filter, treated with a buffering agent and frozen until delivered to the State Environmental Laboratory. Organics have an increased affinity for polypropylene, and allowing sample water to contact polypropylene bottles or other collection equipment may cause concentrations to be significantly underestimated. Therefore, when organics analyses are required, water is collected using a 1-Liter Teflon bottle and composited into a 2-gallon glass bottle. The laboratory sample is aliquoted by inverting the glass bottle 10 times and dispensing to one-quart or one-pint clear or amber glass jars depending on the type of organic analysis. The samples are placed on ice for preservation. Bacteriological samples are collected using a composite grab sample method and are aliquoted to two 100mL bacteria bottles for laboratory analysis.

Biological data are collected using a variety of methods. Typically, fish are collected using electrofishing methods. Alternatively, a seine net is used to collect fish when conductivity is not conducive to electrofishing. Benthic macroinvertebrates are collected by targeting the richest habitats in the water body, which includes riffles, streamside vegetation, and woody debris. Collections are then shipped to an outside lab where a subsample is taken for taxonomic analysis. Various habitat measures are also included during each biological sampling event. During fish collections, staff conduct habitat assessments derived from standard EPA methods and collect both quantitative and qualitative measurements on in-stream and riparian characteristics. During macroinvertebrate collections, habitat assessment is focused on determining target habitat type and substrate composition. Benthic chlorophyll-a samples are gathered from the characteristic substrates of the stream.

Table 2. Variables Monitored by the BUMP Stream Sampling Program.

SAMPLE VARIABLES		
General Water Quality Variables – Sampled 6 times annually		
Dissolved Oxygen (D. O.)	pH	Specific Conductance
Temperature	Total Dissolved Solids	% D. O. Saturation
Salinity	Total Alkalinity	Total Hardness
Chloride	Nephelometric Turbidity	Sulfate
Nutrients – Sampled 6 times annually		
***Kjeldahl Nitrogen**	Ammonia Nitrogen	Total Phosphorus

SAMPLE VARIABLES		
*Nitrate Nitrogen	*Nitrite Nitrogen	
Metals – Sampled as needed		
Arsenic	Cadmium	Chromium
Copper	Lead	Mercury
Nickel	Selenium	Silver
Zinc	Thallium	
Organics – Site specific sampling as needed		
Analysis of Pesticides, Herbicides, Fungicides, and other organics		
Bacteriological Communities – Sampled 5-10 times annually (during recreational season)		
Enterococci	*Escherichia coli*	
Biological Communities – Sampled as described below		
Sestonic Chlorophyll-a (8 times annually	Benthic Chlorophyll-a (as needed during summer)	Fish (once every 4-5 years)
Benthic Macroinvertebrates (1 collection in the summer annually)	Habitat (sampled with fish and macroinvertebrate sampling)	

*Total nitrogen is calculated by OWRB staff, based upon concentrations for these compounds

For a more detailed discussion of water quality sampling procedures, please contact the OWRB for copy of the BUMP Standard Operating Procedures (SOP). The SOP document can be obtained by contacting the Oklahoma Water Resources Board/Water Quality Programs Division at (405) 530-8800 or by accessing and downloading the document via the web at the following link. Streams SOP's

Quality Assurance/Quality Control (QA/QC): QA/QC will not be discussed in detail in this report. However, for a comprehensive description of field QA/QC methods, please contact the Oklahoma Water Resources Board/Water Quality Programs Division at (405) 530-8800. For laboratory QA/QC methods please contact the Oklahoma Department of Environmental Quality/Customer Services Division at (405) 702-6100. Comprehensive QA/QC has been performed on all data collected and utilized for this report.

It is also imperative that the state continues to refine the minerals criteria found in OAC 45: Appendix F. The process was begun in earnest in 2005 with a major revision to Appendix F criteria, and the assessments in this report reflect these new criteria. However, some management segment values are still extrapolated from minimum data and from stations not necessarily representative of the entire management segment. By using the OWRB's methodology for the development of site-specific minerals criteria, BUMP data as well as other water quality monitoring program data may be used to refine inconsistent criteria.

RESULTS AND DISCUSSION

It is essential that Oklahoma quantify impacts in a comprehensive and scientific manner and look for trends in water quality to identify waters that are not meeting their assigned beneficial

uses. As a state, we must manage our water resources effectively and direct money to areas in most need of protection or remediation to ensure that we continue to have good quality and sufficient quantity of water to meet our needs well into the 21st century. It is the desire of the Oklahoma Water Resources Board to provide the legislature, the general public and professional water managers with a comprehensive and up-to-date document for their review and approval. Administrative and Technical staff at the OWRB look forward to conducting the Beneficial Use Monitoring Program far into the future and providing the state of Oklahoma with the information it needs to make informed decisions related to the effective management of its precious water resources.

Every two years, the OWRB analyzes data collected by BUMP and uses that data to determine if the waters of the state are meeting their assigned beneficial uses. If the stream/river segment is not meeting its beneficial use it is submitted for inclusion on the EPA's 303(d) list. The latest EPA approved 303(d) list of impaired waters can be found on the Oklahoma Department of Environmental Quality's website. Oklahoma's 303d list

Arkansas River at Bixby

Sample Record	Times Visited	Station ID
November 1998 - 2012	133	120420010010-001AT

Stream Data

County	Tulsa	Request Data By Email
Location	North of the Town of Bixby on State Highway 64	
Latitude/Longitude	35.95585307, -95.88622562	
Planning Watershed	Middle Arkansas (8-digit HUC - 11110101)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	115	17.0	18.3	1.9/34.1	9.0/24.3	
	Turbidity (NTU)	118	45	20	4/638	12/43	19% of values>OWQS
	pH (units)	114	8.02	8.01	7.19/9.15	7.75/8.27	
	Dissolved Oxygen (mg/L)	115	9.84	9.35	3.90/23.03	7.32/11.42	
	Hardness (mg/L)	116	238	237	85/442	195/280	
Minerals	Total Dissolved Solids (mg/L)	54	761	735	296/1372	527/962	
	Specific Conductivity (uS/cm)	115	1499	1442	92/3275	1017/1878	
	Chloride (mg/L)	117	322	272	66/863	220/391	
	Sulfate (mg/L)	117	125	114	29/1580	87/132	
Nutrients	Total Phosphorus (mg/L)	118	0.220	0.198	0.089/0.835	0.160/0.238	
	Total Nitrogen (mg/L)	116	1.46	1.40	0.25/3.56	1.15/1.69	
	Nitrate/Nitrite (mg/L)	118	0.71	0.68	<0.05/2.35	0.43/0.96	
	Chlorophyll A (mg/m^3)	33	17.2	8.7	0.9/167.0	5.5/14.8	TSI=58.5
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	28	358	109	<10/4000	39/304	
	E. Coli (cfu/100ml)(*-Geo. Mn.)	28	127	46	<10/836	18/152	

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	NS	S	S	S						U	S	S
Aesthetics												S
Agriculture					S		S	S				
Secondary Body Contact Recreation									S			
Public & Private Water Supply				S		S			S			
Fish Consumption				S								

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes

U = Assessment yielded undetermined supporting status

Arkansas River at Haskell

Sample Record	Times Visited	Station ID
November 1998 - Current	173	120410010080-001AT

Stream Data

County	Muskogee	Request Data By Email
Location	East of the Town of Haskell on State Highway 104	
Latitude/Longitude	35.82095549, -95.63995264	
Planning Watershed	Middle Arkansas (8-digit HUC - 11110101)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	158	17.6	18.0	1.9/32.6	10.2/25.5	
	Turbidity (NTU)	159	43	20	2/944	11/46	
	pH (units)	158	8.14	8.13	7.15/9.16	7.91/8.37	
	Dissolved Oxygen (mg/L)	157	9.93	9.78	4.51/16.94	8.52/11.13	
	Hardness (mg/L)	158	241	238	136/490	204/281	
Minerals	Total Dissolved Solids (mg/L)	108	805	778	209/1460	627/965	
	Specific Conductivity (uS/cm)	156	1527	1413	411/3436	1168/1815	
	Chloride (mg/L)	170	331	278	26/815	224/426	
	Sulfate (mg/L)	170	106	104	27/205	81/121	
Nutrients	Total Phosphorus (mg/L)	175	0.213	0.194	0.073/0.810	0.160/0.238	
	Total Nitrogen (mg/L)	170	1.35	1.29	0.40/3.18	1.05/1.59	
	Nitrate/Nitrite (mg/L)	171	0.54	0.55	<0.05/1.60	0.21/0.78	
	Chlorophyll A (mg/m^3)	83	21.9	13.8	1.2/140.0	5.0/34.8	TSI=60.9
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	40	208	57	<10/2420	<10/140	
	E. Coli (cfu/100ml)(*-Geo. Mn.)	40	128	10	<10/1515	<10/104	

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	S	S	S	S						U	S	S
Aesthetics												NEI
Agriculture					S		S	S				
Primary Body Contact Recreation									S			
Public & Private Water Supply				S		S			S			
Fish Consumption				S								

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NEI = Not Enough Information

Notes

U = Assessment yielded undetermined supporting status

Arkansas River at Moffett

Sample Record	Times Visited	Station ID
November 1998 - Current	92	220200010010-001AT

Stream Data

County	Sequoyah	Request Data By Email
Location	East of the Town of Moffett on State Highway 64	
Latitude/Longitude	35.39242903, -94.43267795	
Planning Watershed	Lower Arkansas (8-digit HUC - 11110104)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	89	19.5	21.1	1.7/32.6	12.7/27.1	
	Turbidity (NTU)	92	34	22	7/194	15/44	
	pH (units)	89	7.83	7.82	6.87/8.97	7.60/8.06	
	Dissolved Oxygen (mg/L)	89	9.50	8.85	5.35/16.48	7.64/10.62	
	Hardness (mg/L)	89	157	139	39/658	125/178	
Minerals	Total Dissolved Solids (mg/L)	47	315	310	146/536	248/388	
	Specific Conductivity (uS/cm)	87	610	576	195/1333	484/732	
	Chloride (mg/L)	91	101	93	13/293	58/129	
	Sulfate (mg/L)	91	53	51	22/116	36/61	
Nutrients	Total Phosphorus (mg/L)	91	0.121	0.113	0.051/0.330	0.090/0.139	
	Total Nitrogen (mg/L)	90	0.97	0.92	0.45/2.82	0.72/1.12	
	Nitrate/Nitrite (mg/L)	91	0.30	0.24	<0.05/1.17	0.09/0.46	
	Chlorophyll A (mg/m^3)	50	15.3	12.7	<0.1/71.8	7.0/16.2	TSI=57.4
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	24	955	10	<10/12000	<10/20	
	E. Coli (cfu/100ml)(*-Geo. Mn.)	24	140	10	<10/2035	<10/18	

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	S	S	S	S						U	S	S
Aesthetics												S
Agriculture					S		S	S				
Primary Body Contact Recreation									S			
Public & Private Water Supply				S		S			S			
Fish Consumption				S								

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Notes

U = Assessment yielded undetermined supporting status

Arkansas River at Muskogee

Sample Record	Times Visited	Station ID
November 1998 - Current	139	121400010260-001AT

Stream Data

County	Muskogee	Request Data By Email
Location	East of the Town of Muskogee on State Highway 62	
Latitude/Longitude	35.77016066, -95.30031102	
Planning Watershed	Middle Arkansas (8-digit HUC - 11110102)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	138	18.1	18.6	1.9/32.4	11.0/25.6	
	Turbidity (NTU)	139	43	23	5/387	15/39	
	pH (units)	136	8.03	8.02	7.09/9.48	7.73/8.32	
	Dissolved Oxygen (mg/L)	138	8.96	8.85	4.20/14.88	7.08/10.61	
	Hardness (mg/L)	136	183	170	91/418	142/217	
Minerals	Total Dissolved Solids (mg/L)	78	445	398	144/1040	305/559	
	Specific Conductivity (uS/cm)	137	908	791	191/2746	458/1201	
	Chloride (mg/L)	125	165	133	<10/713	76/206	
	Sulfate (mg/L)	126	72	64	28/202	44/89	
Nutrients	Total Phosphorus (mg/L)	139	0.163	0.145	0.053/0.705	0.115/0.174	
	Total Nitrogen (mg/L)	138	1.18	1.10	0.40/3.90	0.92/1.39	
	Nitrate/Nitrite (mg/L)	139	0.43	0.39	<0.05/1.21	0.17/0.63	
	Chlorophyll A (mg/m^3)	65	19.2	14.5	<0.1/90.0	8.6/26.7	TSI=59.6
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	31	3685	20	<10/75000	<10/200	
	E. Coli (cfu/100ml)(*-Geo. Mn.)	31	378	20	<10/5492	<10/52	

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	S	S	S	S						S	S	S
Aesthetics												S
Agriculture					S		S	S				
Primary Body Contact Recreation									S			
Public & Private Water Supply				S		S			S			
Fish Consumption				S								

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NS = Not Supporting
NEI = Not Enough Information

Notes

Sampling and Assessment by the **Oklahoma Water Resources Board** – 3800 Classen Blvd, Oklahoma City, OK, 73118 – 405.530.8800 – http://www.owrb.ok.gov

Arkansas River at Ralston

Sample Record	Times Visited	Station ID
December 1998 - Current	175	621200010200-001AT

Stream Data

County	Pawnee	Request Data By Email
Location	East of the Town of Ralston on State Highway 18	
Latitude/Longitude	36.50481274, -96.72547095	
Planning Watershed	Upper Arkansas (8-digit HUC - 11060006)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	166	18.0	19.0	-0.4/38.0	10.2/25.7	
	Turbidity (NTU)	167	113	33	2/1119	13/98	
	pH (units)	166	8.21	8.23	6.96/9.00	8.01/8.41	
	Dissolved Oxygen (mg/L)	166	10.04	9.71	1.73/26.76	8.12/11.66	
	Hardness (mg/L)	166	260	250	82/635	197/320	
Minerals	Total Dissolved Solids (mg/L)	106	723	668	203/1510	525/862	
	Specific Conductivity (uS/cm)	166	1213	1105	186/4882	755/1546	
	Chloride (mg/L)	174	259	221	18/1380	153/298	
	Sulfate (mg/L)	174	109	102	36/268	85/134	
Nutrients	Total Phosphorus (mg/L)	174	0.227	0.177	<0.005/1.390	0.126/0.257	
	Total Nitrogen (mg/L)	174	1.35	1.27	<0.10/5.78	0.92/1.60	
	Nitrate/Nitrite (mg/L)	174	0.48	0.44	<0.03/1.72	<0.05/0.71	
	Chlorophyll A (mg/m^3)	77	24.9	19.0	2.0/113.0	10.1/35.2	TSI=62.1
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	37	2337	100	<10/65000	20/1035	Mean>OWQS
	E. Coli (cfu/100ml)(*-Geo. Mn.)	37	603	20	<10/9804	<10/290	

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	S	S	S	S						U	S	S
Aesthetics												NEI
Agriculture					S		S	S				
Primary Body Contact Recreation									NS			
Public & Private Water Supply				NEI		NEI			NEI			
Fish Consumption				S								

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NEI = Not Enough Information

Notes

U = Assessment yielded undetermined supporting status

Arkansas River at Sand Springs

Sample Record	Times Visited	Station ID
September 1999 - 2012	118	120420010130-001AT

Stream Data

County	Tulsa	Request Data By Email
Location	South of the Town of Sand Springs on State Highway 97	
Latitude/Longitude	36.12393866, -96.11578343	
Planning Watershed	Middle Arkansas (8-digit HUC - 11110101)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	102	17.3	19.1	0.5/33.0	9.3/24.6	
	Turbidity (NTU)	104	34	15	3/735	8/32	19% of values>OWQS
	pH (units)	102	7.87	7.87	7.16/8.63	7.69/8.02	
	Dissolved Oxygen (mg/L)	102	8.92	9.00	2.84/15.85	6.98/10.51	
	Hardness (mg/L)	104	243	238	59/412	196/288	
Minerals	Total Dissolved Solids (mg/L)	44	846	807	347/1650	601/1059	
	Specific Conductivity (uS/cm)	102	1646	1564	179/4080	1128/1995	
	Chloride (mg/L)	104	367	309	91/1100	238/468	
	Sulfate (mg/L)	105	115	112	29/228	85/137	
Nutrients	Total Phosphorus (mg/L)	105	0.138	0.140	0.016/0.281	0.109/0.164	
	Total Nitrogen (mg/L)	104	1.15	1.18	0.48/2.20	0.78/1.45	
	Nitrate/Nitrite (mg/L)	106	0.54	0.55	<0.05/1.36	0.24/0.78	
	Chlorophyll A (mg/m^3)	32	6.1	5.4	0.7/18.7	3.1/7.9	TSI=48.3
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	25	67	20	<10/400	<10/87	
	E. Coli (cfu/100ml)(*-Geo. Mn.)	25	28	20	<10/119	<10/36	

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	NS	S	S	S						U	S	S
Aesthetics												S
Agriculture					S		S	S				
Secondary Body Contact Recreation									S			
Public & Private Water Supply				S		S			S			
Fish Consumption				S								

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes

U = Assessment yielded undetermined supporting status

Barren Fork at Eldon

Sample Record	Times Visited	Station ID
November 1998 - Current	201	121700050010-001AT

Stream Data

County	Cherokee	Request Data By Email
Location	South of the Town of Eldon on State Highway 51	
Latitude/Longitude	35.92173377, -94.83726494	
Planning Watershed	Lower Arkansas (8-digit HUC - 11110103)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	149	17.2	17.9	3.1/29.9	11.2/22.6	
	Turbidity (NTU)	147	4	2	1/45	2/3	
	pH (units)	148	7.63	7.60	6.37/8.82	7.36/7.88	
	Dissolved Oxygen (mg/L)	149	9.63	9.79	4.40/14.53	7.98/11.10	
	Hardness (mg/L)	150	100	98	46/159	90/108	
Minerals	Total Dissolved Solids (mg/L)	33	136	121	92/545	109/134	
	Specific Conductivity (uS/cm)	149	203	201	20/713	180/220	
	Chloride (mg/L)	111	8	10	<10/44	<5/10	
	Sulfate (mg/L)	111	9	10	<10/40	6/10	
Nutrients	Total Phosphorus (mg/L)	155	0.032	0.028	<0.005/0.217	0.021/0.034	
	Total Nitrogen (mg/L)	155	1.48	1.33	<0.10/4.20	0.83/1.96	
	Nitrate/Nitrite (mg/L)	155	1.32	1.24	0.14/3.83	0.72/1.71	
	Chlorophyll A (mg/m^3)	95	1.4	1.1	<0.1/11.7	0.7/1.7	TSI=34.00
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	83	228	20	<10/3900	10/80	
	E. Coli (cfu/100ml)(*-Geo. Mn.)	83	99	<10	<10/2420	10/41	Mean>OWQS

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment	Total Phosphorus
Fish & Wildlife Propagation	S	S	S	S						S	S	S	
Aesthetics												S	S
Agriculture					S		S	S					
Primary Body Contact Recreation									NS				
Public & Private Water Supply				S		S			S				
Fish Consumption				S									

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes

Beaver River at Beaver

Sample Record	Times Visited	Station ID
November 1998 - Current	140	720500020290-001AT

Stream Data

County	Beaver	Request Data By Email
Location	North of the Town of Beaver on State Highway 23	
Latitude/Longitude	36.82280124, -100.5193698	
Planning Watershed	Panhandle (8-digit HUC - 11100102)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	112	16.1	15.2	1.0/32.0	10.2/23.2	
	Turbidity (NTU)	115	19	8	1/808	4/17	
	pH (units)	111	7.66	7.61	6.93/9.10	7.32/7.97	
	Dissolved Oxygen (mg/L)	113	8.81	8.74	0.16/20.28	6.31/10.88	
	Hardness (mg/L)	113	1827	1505	201/4310	1122/2500	
Minerals	Total Dissolved Solids (mg/L)	71	6925	6820	1360/11600	4779/9280	100% of values>OWQS
	Specific Conductivity (uS/cm)	114	9669	8402	451/17999	7147/12703	
	Chloride (mg/L)	115	2804	2500	177/6510	1934/3390	100% of values>OWQS
	Sulfate (mg/L)	115	1042	902	103/2620	639/1440	59% of values>OWQS
Nutrients	Total Phosphorus (mg/L)	115	0.085	0.039	0.008/2.119	0.023/0.070	
	Total Nitrogen (mg/L)	116	1.11	0.96	<0.10/12.11	0.59/1.21	
	Nitrate/Nitrite (mg/L)	115	0.09	<0.05	<0.05/3.96	<0.05/<0.05	
	Chlorophyll A (mg/m^3)	21	42.8	18.5	3.2/143.0	9.8/100.1	TSI=67.4
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	23	1320	199	20/9208	100/1100	Mean>OWQS
	E. Coli (cfu/100ml)(*-Geo. Mn.)	23	1285	221	<10/5794	63/2987	Mean>OWQS

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	S	S	NS	NS						NS	NS	NS
Aesthetics												S
Agriculture					NS		NS	NS				
Primary Body Contact Recreation									NS			
Public & Private Water Supply				S		S			S			
Fish Consumption				S								

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes

Fish & Wildlife Propagation not supporting for Selenium
U = Assessment yielded undetermined supporting status

Beaver Creek at Ryan

Sample Record	Times Visited	Station ID
January 2013 - Current	49	311200000030-001AT

Stream Data

County	Jefferson	Request Data By Email
Location	West of the Town of Ryan off State Highway 81	
Latitude/Longitude	34.020316 , -97.971356	
Planning Watershed	Northern Beaver (8-digit HUC - 11130208)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	49	18.5	18.4	0.5/30.6	12.9/25.4	
	Turbidity (NTU)	49	87	50	8/473	27/94	
	pH (units)	49	8.22	8.15	7.42/9.17	7.86/8.56	
	Dissolved Oxygen (mg/L)	49	8.82	7.37	2.89/25.19	5.47/11.06	
	Hardness (mg/L)	49	276	254	94/500	180/360	
Minerals	Total Dissolved Solids (mg/L)	47	563	442	125/1590	268/730	
	Specific Conductivity (uS/cm)	49	1083	877	214/3476	466/1384	
	Chloride (mg/L)	47	152	90	12/666	29/175	
	Sulfate (mg/L)	47	114	93	41/296	74/154	
Nutrients	Total Phosphorus (mg/L)	47	0.490	0.447	0.069/1.410	0.304/0.545	
	Total Nitrogen (mg/L)	47	3.15	2.35	0.87/14.26	1.35/3.66	
	Nitrate/Nitrite (mg/L)	47	1.41	0.33	<0.05/11.80	0.07/1.47	
	Chlorophyll A (mg/m^3)	47	87.0	47.6	<0.1/455.0	13.0/152.0	TSI=74.4
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	12	438	394	108/980	261/488	
	E. Coli (cfu/100ml)(*-Geo. Mn.)	12	181	144	<10/517	23/249	

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	NS	S	NS	S						NEI	U	NEI
Aesthetics												NEI
Agriculture					S		S	NS				
Primary Body Contact Recreation									NEI			
Public & Private Water Supply				S		S			S			
Fish Consumption				S								

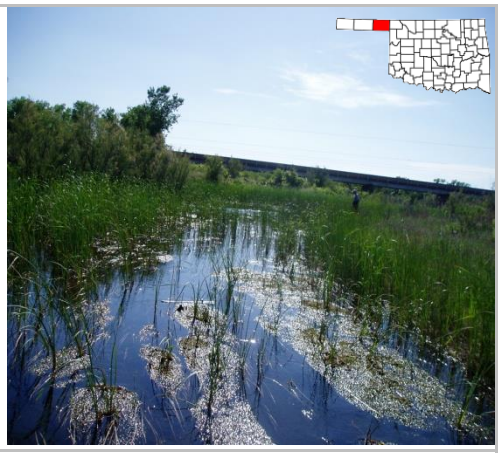
S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes

U = Assessment yielded undetermined supporting status

Beaver River at Gate

Sample Record	Times Visited	Station ID
October 2000 – September 2007	45	720500020140-001AT



Stream Data

County	Beaver	Request Data By Email
Location	South of the Town of Gate on County Road N 1650	
Latitude/Longitude	36.78998597, -100.0574831	
Planning Watershed	Panhandle (8-digit HUC -11100201)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	37	20.0	13.0	5.5/30.9	19.1/26.3	
	Turbidity (NTU)	37	11	4	8/260	35/50	
	pH (units)	35	8.03	7.83	6.43/8.60	7.63/7.91	
	Dissolved Oxygen (mg/L)	37	9.99	7.91	4.13/15.07	8.56/10.50	
	Hardness (mg/L)	37	650	508	12/235	31/44	
Minerals	Total Dissolved Solids (mg/L)	3	2140	1830	45/93	66/77	
	Specific Conductivity (uS/cm)	37	3679	2525	<10/299	74/94	
	Chloride (mg/L)	37	964	631	<10/69	<10/<10	50% of values>OWQS
	Sulfate (mg/L)	37	365	268	<10/56	17/22	
Nutrients	Total Phosphorus (mg/L)	37	0.050	0.019	0.022/0.259	0.061/0.081	
	Total Nitrogen (mg/L)	37	0.73	0.44	0.13/1.47	0.57/0.74	
	Nitrate/Nitrite (mg/L)	37	0.06	<0.05	<0.05/1.02	<0.05/0.15	
	Chlorophyll A (mg/m^3)	0	0.0	0.0	1.0/34.3	7.2/12.7	No Data
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	12	622	43	<10/6700	<10/65	Mean>OWQS
	E. Coli (cfu/100ml)(*-Geo. Mn.)	12	138	<10	<10/528	31/71	

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	S	S	S	S						NS	NS	NS
Aesthetics												NEI
Agriculture					S		NS	S				
Primary Body Contact Recreation									NS			
Public & Private Water Supply				NEI		NEI			NEI			
Fish Consumption				NS								

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes

Fish Consumption not supporting for Lead

Sampling and Assessment by the **Oklahoma Water Resources Board** – 3800 Classen Blvd, Oklahoma City, OK, 73118 – 405.530.8800 – http://www.owrb.ok.gov

Beaver River at Guymon

Sample Record	Times Visited	Station ID
April 1999 - 2012	123	720510000190-001AT

Stream Data

County	Texas	Request Data By Email
Location	West of the Town of Guymon off State Highway 64	
Latitude/Longitude	36.70576142, -101.6365036	
Planning Watershed	Panhandle (8-digit HUC - 11100101)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	111	15.4	8.0	-1.1/37.3	17.4/26.0	
	Turbidity (NTU)	115	20	8	6/>1000	33/79	
	pH (units)	109	8.00	7.76	7.06/9.72	8.14/8.33	
	Dissolved Oxygen (mg/L)	113	8.11	5.99	4.55/18.09	9.79/11.62	22% of values<OWQS and 7% of values<alt OWQS
	Hardness (mg/L)	113	265	205	196/1890	610/774	
Minerals	Total Dissolved Solids (mg/L)	37	298	290	1108/9510	4400/5305	
	Specific Conductivity (uS/cm)	112	482	452	704/19499	7678/10419	
	Chloride (mg/L)	99	11	<10	91/6500	2219/2689	
	Sulfate (mg/L)	99	30	27	115/851	451/545	
Nutrients	Total Phosphorus (mg/L)	113	0.053	0.018	0.029/1.580	0.326/0.506	
	Total Nitrogen (mg/L)	113	0.62	0.40	0.58/6.40	1.87/2.36	
	Nitrate/Nitrite (mg/L)	113	0.14	<0.05	<0.05/4.99	0.95/1.44	
	Chlorophyll A (mg/m^3)	20	4.0	1.6	0.3/86.2	26.1/41.6	TSI=44.1
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	22	1842	132	<10/18000	149/1925	Mean>OWQS
	E. Coli (cfu/100ml)(*-Geo. Mn.)	22	1376	152	<10/2415	121/510	Mean>OWQS

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	S	S	U	S						S	U	S
Aesthetics												S
Agriculture					S		S	S				
Primary Body Contact Recreation									NS			
Public & Private Water Supply				NEI		NEI			NEI			
Fish Consumption				S								

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes

U = Assessment yielded undetermined supporting status

Beaver River at Ft. Supply

Sample Record	Times Visited	Station ID
November 1998 - Current	146	720500020010-002AT

Stream Data

County	Harper	Request Data By Email
Location	Northwest of the Town of Ft. Supply on State Highway 183	
Latitude/Longitude	36.5908354, -99.59121563	
Planning Watershed	Panhandle (8-digit HUC - 11100201)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	143	18.2	18.8	-0.1/36.2	10.9/25.9	
	Turbidity (NTU)	146	11	6	1/65	4/12	
	pH (units)	140	8.03	8.07	7.26/8.58	7.90/8.24	
	Dissolved Oxygen (mg/L)	142	9.80	9.99	1.46/16.50	8.16/11.74	25% of values<OWQS and 25%of values<alt OWQS
	Hardness (mg/L)	144	522	469	238/1260	374/589	
Minerals	Total Dissolved Solids (mg/L)	83	944	800	401/1920	698/1110	
	Specific Conductivity (uS/cm)	144	1572	1443	650/3419	1222/1740	
	Chloride (mg/L)	145	226	204	69/786	179/232	
	Sulfate (mg/L)	144	294	248	47/1170	169/322	
Nutrients	Total Phosphorus (mg/L)	145	0.038	0.024	<0.005/0.169	0.014/0.053	
	Total Nitrogen (mg/L)	146	0.72	0.71	0.20/1.60	0.48/0.90	
	Nitrate/Nitrite (mg/L)	146	0.21	0.05	<0.05/1.17	<0.05/0.32	
	Chlorophyll A (mg/m^3)	69	4.4	3.4	0.3/28.4	1.7/5.3	TSI=45.0
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	28	482	243	20/3000	103/582	Mean>OWQS
	E. Coli (cfu/100ml)(*-Geo. Mn.)	28	138	80	<10/437	20/180	Mean>OWQS

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	S	S	NS	S						S	S	S
Aesthetics												S
Agriculture					S		S	S				
Primary Body Contact Recreation									NS			
Public & Private Water Supply				S		S			S			
Fish Consumption				NS								

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes: *Fish Consumption not supporting for Lead*

Beaver River at Turpin

Sample Record	Times Visited	Station ID
November 2000 – May 2008	69	720500020450-001AT

Stream Data

County	Beaver	Request Data By Email
Location	South of the Town of Turpin on State Highway 83	
Latitude/Longitude	36.75941268, -100.8439297	
Planning Watershed	Panhandle (8-digit HUC - 11100102)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	58	15.2	9.0	-0.5/32.6	15.9/22.9	
	Turbidity (NTU)	59	6	2	2/>1000	17/36	
	pH (units)	58	7.87	7.66	7.36/8.70	8.08/8.25	
	Dissolved Oxygen (mg/L)	58	10.89	8.65	1.13/21.02	9.50/11.95	
	Hardness (mg/L)	59	1177	1039	58/1425	678/793	
Minerals	Total Dissolved Solids (mg/L)	8	6020	5785	10/3410	1510/1722	100% of values>OWQS
	Specific Conductivity (uS/cm)	59	9288	8582	711/4187	2400/2595	
	Chloride (mg/L)	58	2561	2312	<10/749	381/433	100% of values>OWQS
	Sulfate (mg/L)	59	705	616	<10/1681	451/575	17% of values>OWQS
Nutrients	Total Phosphorus (mg/L)	59	0.039	0.018	<0.005/1.890	0.030/0.054	
	Total Nitrogen (mg/L)	59	0.85	0.58	0.14/5.29	0.68/0.86	
	Nitrate/Nitrite (mg/L)	59	0.06	<0.05	<0.05/2.82	0.12/0.29	
	Chlorophyll A (mg/m^3)	15	17.7	2.7	0.0/0.0	0.0/0.0	TSI=58.8
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	19	2250	30	<10/3000	50/350	Mean>OWQS
	E. Coli (cfu/100ml)(*-Geo. Mn.)	19	1108	41	<10/253	20/36	Mean>OWQS

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	S	S	S	S						NS	S	NS
Aesthetics												NEI
Agriculture					NS		NS	NS				
Primary Body Contact Recreation									NS			
Public & Private Water Supply				S		S			S			
Fish Consumption				NS								

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes

Big Cabin Creek at Big Cabin

Sample Record	Times Visited	Station ID
September 1999 - 2012	131	121600060060-001AT

Stream Data

County	Craig	Request Data By Email
Location	Northeast of the Town of Big Cabin on road 310	
Latitude/Longitude	36.56838771, -95.15177919	
Planning Watershed	Grand (8-digit HUC - 11070209)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	109	16.9	10.0	0.3/32.4	17.2/24.4	
	Turbidity (NTU)	108	41	18	7/755	28/41	
	pH (units)	109	7.60	7.40	6.78/8.79	7.56/7.81	
	Dissolved Oxygen (mg/L)	109	7.86	5.85	3.08/18.50	7.38/9.59	
	Hardness (mg/L)	107	244	175	13/671	218/292	
Minerals	Total Dissolved Solids (mg/L)	31	369	265	164/964	356/422	
	Specific Conductivity (uS/cm)	108	568	446	165/1385	557/674	
	Chloride (mg/L)	109	21	<10	<10/85	<10/26	
	Sulfate (mg/L)	110	161	96	34/538	140/200	15% of values>OWQS
Nutrients	Total Phosphorus (mg/L)	110	0.195	0.094	0.026/1.090	0.142/0.217	
	Total Nitrogen (mg/L)	109	1.79	0.93	0.49/11.16	1.36/1.98	
	Nitrate/Nitrite (mg/L)	110	0.80	0.21	<0.05/10.10	0.39/0.82	
	Chlorophyll A (mg/m^3)	55	17.9	3.5	1.2/102.0	9.5/24.0	TSI=58.9
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	31	15901	20	<10/437000	52/616	
	E. Coli (cfu/100ml)(*-Geo. Mn.)	31	1558	31	<10/24196	110/847	

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	S	S	S	S						S	S	S
Aesthetics												S
Agriculture					NS		S	S				
Primary Body Contact Recreation									S			
Public & Private Water Supply				S		S			S			
Fish Consumption				S								

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes

Bird Creek at Avant

Sample Record	Times Visited	Station ID
January 2012 - Current	21	121300020010-001AT

Stream Data

County	Osage	Request Data By Email
Location	South of the town of Avant off State Highway 11	
Latitude/Longitude	36.484775359, -96.059833576	
Planning Watershed	Middle Arkansas (8-digit HUC -11070107)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	15	19.8	21.9	3.4/29.3	10.8/28.1	
	Turbidity (NTU)	15	9	7	4/28	6/10	
	pH (units)	15	8.01	8.00	7.49/8.44	7.88/8.11	
	Dissolved Oxygen (mg/L)	15	9.17	8.41	7.18/13.03	7.89/10.10	
	Hardness (mg/L)	15	125	124	85/177	112/136	
Minerals	Total Dissolved Solids (mg/L)	20	178	178	86/289	141/197	
	Specific Conductivity (uS/cm)	15	326	305	181/496	247/374	
	Chloride (mg/L)	20	31	27	11/76	23/37	
	Sulfate (mg/L)	20	20	18	13/34	15/25	
Nutrients	Total Phosphorus (mg/L)	20	0.035	0.030	0.019/0.073	0.025/0.039	
	Total Nitrogen (mg/L)	20	0.55	0.55	0.38/0.90	0.47/0.64	
	Nitrate/Nitrite (mg/L)	20	<0.05	<0.05	<0.05/0.16	<0.05/0.05	
	Chlorophyll A (mg/m^3)	20	7.3	6.7	2.1/19.2	3.8/9.3	TSI=50.1
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	5	141	206	16/248	16/233	
	E. Coli (cfu/100ml)(*-Geo. Mn.)	5	157	20	17/613	18/363	

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	NEI	NEI	NEI	NEI						NEI	NEI	NEI
Aesthetics												NEI
Agriculture					NEI		NEI	NEI				
Primary Body Contact Recreation									NEI			
Public & Private Water Supply				S		S			S			
Fish Consumption				S								

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes

Bird Creek at Port of Catoosa

Sample Record	Times Visited	Station ID
November 1998 - Current	170	121300010010-001AT

Stream Data

County	Tulsa	Request Data By Email
Location	Northwest of the Town of Catoosa on State Highway 266	
Latitude/Longitude	36.22311412, -95.81921244	
Planning Watershed	Middle Arkansas (8-digit HUC - 11070107)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	159	18.0	18.0	2.8/31.9	11.1/25.4	
	Turbidity (NTU)	159	73	28	6/>1000	19/63	
	pH (units)	159	7.61	7.60	6.88/9.12	7.42/7.76	
	Dissolved Oxygen (mg/L)	158	8.30	7.92	3.17/19.26	6.62/9.78	
	Hardness (mg/L)	159	135	131	58/294	113/159	
Minerals	Total Dissolved Solids (mg/L)	92	241	245	64/454	211/274	
	Specific Conductivity (uS/cm)	158	413	408	26/1570	329/478	
	Chloride (mg/L)	157	43	40	<10/219	31/50	
	Sulfate (mg/L)	157	43	38	19/293	30/45	
Nutrients	Total Phosphorus (mg/L)	170	0.411	0.388	<0.050/1.020	0.267/0.526	
	Total Nitrogen (mg/L)	172	3.13	2.99	<0.10/8.16	2.06/4.09	
	Nitrate/Nitrite (mg/L)	172	2.15	2.00	0.16/6.90	1.06/3.11	
	Chlorophyll A (mg/m^3)	105	8.3	6.4	1.7/86.4	4.5/8.9	TSI=51.4
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	37	3421	146	<10/73000	32/738	Mean>OWQS
	E. Coli (cfu/100ml)(*-Geo. Mn.)	37	841	78	<10/17329	47/417	Mean>OWQS

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	S	S	S	S						S	NEI	S
Aesthetics												S
Agriculture					S		S	S				
Primary Body Contact Recreation									NS			
Public & Private Water Supply				S		S			S			
Fish Consumption				S								

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes

Sampling and Assessment by the **Oklahoma Water Resources Board** – 3800 Classen Blvd, Oklahoma City, OK, 73118 – 405.530.8800 – http://www.owrb.ok.gov

Black Bear Creek at Pawnee

Sample Record	Times Visited	Station ID
December 1998 - Current	179	621200030010-001AT

Stream Data

County	Pawnee	Request Data By Email
Location	North of the Town of Pawnee on State Highway 18	
Latitude/Longitude	36.34341161, -96.79985204	
Planning Watershed	Upper Arkansas (8-digit HUC - 11060006)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	167	17.2	18.0	-0.3/33.3	9.3/24.6	
	Turbidity (NTU)	168	143	54	5/>1000	20/162	
	pH (units)	167	7.92	7.93	6.26/8.70	7.67/8.16	
	Dissolved Oxygen (mg/L)	167	8.63	8.08	1.70/30.01	6.16/10.13	
	Hardness (mg/L)	166	223	214	42/465	139/299	
Minerals	Total Dissolved Solids (mg/L)	105	445	380	132/1170	245/602	
	Specific Conductivity (uS/cm)	166	813	700	158/2215	411/1117	
	Chloride (mg/L)	175	138	105	<10/564	55/197	
	Sulfate (mg/L)	175	47	43	<10/145	32/58	
Nutrients	Total Phosphorus (mg/L)	183	0.240	0.187	<0.010/1.330	0.120/0.333	
	Total Nitrogen (mg/L)	174	1.55	1.42	0.47/4.36	0.95/1.93	
	Nitrate/Nitrite (mg/L)	175	0.36	0.28	<0.05/2.61	<0.05/0.56	
	Chlorophyll A (mg/m^3)	56	19.0	11.9	2.3/81.2	7.7/22.5	TSI=59.5
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	38	1239	287	<10/19000	56/1215	Mean>OWQS
	E. Coli (cfu/100ml)(*-Geo. Mn.)	38	455	66	<10/10462	20/267	

Beneficial Uses

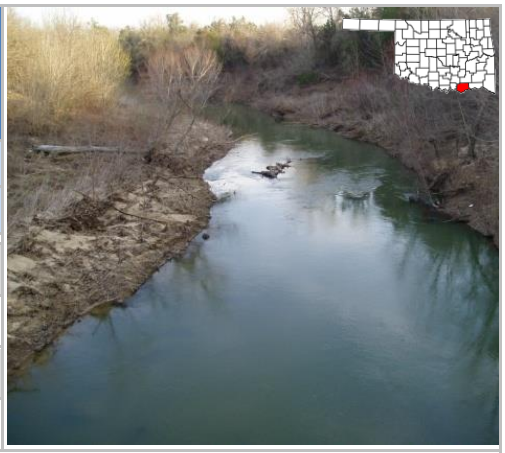
Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	NS	S	S	S						S	U	S
Aesthetics												S
Agriculture					S		S	S				
Primary Body Contact Recreation									NS			
Public & Private Water Supply				NEI		NEI			NEI			
Fish Consumption				NS								

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes *U = Assessment yielded undetermined supporting status*

Blue River at Durant

Sample Record	Times Visited	Station ID
November 1998 - Current	184	410600010010-001AT



Stream Data

County	Bryan	Request Data By Email
Location	East of the Town of Durant off State Highway 70	
Latitude/Longitude	33.99732546, -96.24093554	
Planning Watershed	Blue-Boggy (8-digit HUC - 11140102)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	168	18.8	18.7	2.7/33.0	12.0/26.2	
	Turbidity (NTU)	171	63	25	3/707	14/45	
	pH (units)	166	8.03	8.06	7.06/8.80	7.90/8.20	
	Dissolved Oxygen (mg/L)	168	8.56	8.32	4.14/20.41	6.92/9.82	
	Hardness (mg/L)	169	221	234	68/346	197/254	
Minerals	Total Dissolved Solids (mg/L)	52	228	237	68/288	214/251	
	Specific Conductivity (uS/cm)	168	398	413	139/596	349/464	
	Chloride (mg/L)	117	8	10	<10/63	<10/<10	
	Sulfate (mg/L)	116	19	16	<10/82	12/22	
Nutrients	Total Phosphorus (mg/L)	175	0.082	0.052	<0.005/0.497	0.034/0.093	
	Total Nitrogen (mg/L)	172	0.60	0.44	<0.10/3.12	0.29/0.77	
	Nitrate/Nitrite (mg/L)	170	0.15	0.05	<0.05/1.40	0.05/0.19	
	Chlorophyll A (mg/m^3)	67	3.8	3.1	0.2/29.0	0.7/5.3	TSI=43.6
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	45	537	101	<10/5000	32/481	
	E. Coli (cfu/100ml)(*-Geo. Mn.)	45	247	104	<10/2420	41/276	

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	S	S	S	S						S	S	S
Aesthetics												S
Agriculture					S		S	S				
Primary Body Contact Recreation									S			
Public & Private Water Supply				S		S			S			
Fish Consumption				S								

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes

Brushy Creek at Haileyville

Sample Record	Times Visited	Station ID
November 1998 - 2012	136	220600030010-001AT

Stream Data

County	Pittsburg	Request Data By Email
Location	Southwest of the Town of Haileyville on State Highway 63	
Latitude/Longitude	34.843370, -95.614373	
Planning Watershed	Eufaula (8-digit HUC - 11090204)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	117	17.9	10.9	-0.2/32.0	16.0/22.9	
	Turbidity (NTU)	119	72	25	2/146	14/25	14% of values>OWQS
	pH (units)	117	7.37	7.08	7.21/8.90	8.00/8.18	
	Dissolved Oxygen (mg/L)	117	7.19	5.10	0.06/30.97	8.01/9.82	12% of values<OWQS
	Hardness (mg/L)	117	97	52	70/1263	228/268	
Minerals	Total Dissolved Solids (mg/L)	37	128	98	270/331	295/309	
	Specific Conductivity (uS/cm)	117	276	123	170/668	478/524	
	Chloride (mg/L)	104	26	<10	<10/25	11/13	
	Sulfate (mg/L)	105	63	26	17/81	30/33	
Nutrients	Total Phosphorus (mg/L)	120	0.116	0.053	<0.005/0.504	0.035/0.056	
	Total Nitrogen (mg/L)	119	0.91	0.61	0.16/5.27	0.51/0.68	
	Nitrate/Nitrite (mg/L)	120	0.17	<0.05	<0.05/0.76	<0.05/0.17	
	Chlorophyll A (mg/m^3)	23	5.9	1.3	0.2/24.9	2.4/4.4	TSI=47.9
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	26	944	<10	31/21000	233/1325	Mean>OWQS
	E. Coli (cfu/100ml)(*-Geo. Mn.)	26	1001	<10	74/24192	233/448	

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	NS	S	U	S						S	U	NS
Aesthetics												NS
Agriculture					S		S	S				
Primary Body Contact Recreation									NS			
Public & Private Water Supply				S		S			S			NS
Fish Consumption				NS								

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes

Fish Consumption not supporting for Lead
Aesthetics, Fish & Wildlife Propagation, Private & Public Water Supply not supporting for oil & grease
U = Assessment yielded undetermined supporting status

Canadian River at Bridgeport

Sample Record	Times Visited	Station ID
February 1999 - Current	167	520610020150-001AT

Stream Data

County	Blaine	Request Data By Email
Location	East of the Town of Bridgeport on US Highway 281	
Latitude/Longitude	35.54292908, -98.31831715	
Planning Watershed	West Central (8-digit HUC - 11090202)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	160	17.3	17.8	-0.6/36.3	10.5/24.6	
	Turbidity (NTU)	157	63	24	3/>1000	10/59	
	pH (units)	156	8.12	8.15	7.60/8.60	7.98/8.28	
	Dissolved Oxygen (mg/L)	159	9.66	9.45	0.38/19.77	8.34/10.56	
	Hardness (mg/L)	161	563	552	126/2100	452/627	
Minerals	Total Dissolved Solids (mg/L)	99	1014	1070	265/1550	790/1220	
	Specific Conductivity (uS/cm)	160	1470	1521	334/2552	1073/1860	
	Chloride (mg/L)	160	156	179	12/472	46/231	
	Sulfate (mg/L)	162	413	411	106/752	347/469	
Nutrients	Total Phosphorus (mg/L)	162	0.136	0.092	0.010/2.140	0.060/0.136	
	Total Nitrogen (mg/L)	161	1.30	1.15	0.38/7.47	0.89/1.48	
	Nitrate/Nitrite (mg/L)	162	0.49	0.40	<0.05/2.50	0.09/0.66	
	Chlorophyll A (mg/m^3)	78	15.4	8.5	2.3/84.4	5.6/22.2	TSI=57.4
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	34	734	89	<10/12033	31/388	Mean>OWQS
	E. Coli (cfu/100ml)(*-Geo. Mn.)	34	923	26	<10/24192	<10/95	

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	S	S	S	S						S	S	S
Aesthetics												S
Agriculture					S		S	S				
Primary Body Contact Recreation									NS			
Public & Private Water Supply				NEI		NEI			NEI			
Fish Consumption				NS								

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes: *Fish Consumption not supporting for Lead*

Sampling and Assessment by the **Oklahoma Water Resources Board** – 3800 Classen Blvd, Oklahoma City, OK, 73118 – 405.530.8800 – http://www.owrb.ok.gov

Canadian River at Calvin

Sample Record	Times Visited	Station ID
December 1998 - Current	180	220600010119-001AT

Stream Data

County	Hughes	Request Data By Email
Location	North of the Town of Calvin on State Highway 270	
Latitude/Longitude	34.97589666, -96.24231022	
Planning Watershed	Central (8-digit HUC - 11090202)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	162	18.6	19.0	1.5/36.3	11.6/26.0	
	Turbidity (NTU)	161	138	41	4/>1000	20/131	
	pH (units)	162	8.27	8.27	7.19/9.04	8.13/8.44	
	Dissolved Oxygen (mg/L)	162	10.13	9.89	3.79/23.59	8.27/11.71	
	Hardness (mg/L)	164	323	311	99/727	247/397	
Minerals	Total Dissolved Solids (mg/L)	100	613	597	312/1064	492/722	
	Specific Conductivity (uS/cm)	162	998	1005	318/1749	751/1243	
	Chloride (mg/L)	162	131	132	25/253	101/169	
	Sulfate (mg/L)	163	167	154	32/473	106/211	
Nutrients	Total Phosphorus (mg/L)	167	0.240	0.195	0.023/1.160	0.135/0.287	
	Total Nitrogen (mg/L)	166	1.59	1.50	0.35/6.36	1.06/1.99	
	Nitrate/Nitrite (mg/L)	167	0.33	<0.05	<0.05/1.83	<0.05/0.53	
	Chlorophyll A (mg/m^3)	101	40.8	29.1	3.4/178.0	17.2/53.7	TSI=67.0
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	54	927	93	<10/24192	28/458	Mean>OWQS
	E. Coli (cfu/100ml)(*-Geo. Mn.)	54	239	20	<10/2420	<10/87	

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	S	S	S	S						NS	S	NS
Aesthetics												NEI
Agriculture					S		S	S				
Primary Body Contact Recreation									NS			
Public & Private Water Supply				NEI		NEI			NEI			
Fish Consumption				NS								

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes: *Fish Consumption not supporting for Lead*

Canadian River at Konawa

Sample Record	Times Visited	Station ID
November 1998 - 2012	135	520600010010-001AT

Stream Data

County	Seminole	Request Data By Email
Location	East of the Town of Konawa on State Highway 377	
Latitude/Longitude	34.93343848, -96.6830356	
Planning Watershed	Central (8-digit HUC - 11090202)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	115	18.0	11.0	3.3/32.4	19.4/25.5	
	Turbidity (NTU)	114	173	22	3/891	39/62	
	pH (units)	116	8.27	8.02	7.14/8.71	7.82/8.03	
	Dissolved Oxygen (mg/L)	114	9.77	7.89	3.71/18.73	8.26/10.86	
	Hardness (mg/L)	115	364	267	<10/301	141/161	
Minerals	Total Dissolved Solids (mg/L)	52	706	551	151/276	212/233	54% of values>OWQS
	Specific Conductivity (uS/cm)	115	1076	793	158/626	326/403	
	Chloride (mg/L)	114	122	81	<10/145	18/34	
	Sulfate (mg/L)	114	246	147	20/129	43/53	
Nutrients	Total Phosphorus (mg/L)	123	0.327	0.175	0.069/1.039	0.173/0.271	
	Total Nitrogen (mg/L)	115	1.83	1.19	0.61/5.98	1.42/2.25	
	Nitrate/Nitrite (mg/L)	116	0.43	<0.05	0.13/4.67	0.54/1.33	
	Chlorophyll A (mg/m^3)	49	39.2	17.8	1.2/76.7	6.8/13.4	TSI=66.6
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	29	915	26	<10/81000	33/230	Mean>OWQS
	E. Coli (cfu/100ml)(*-Geo. Mn.)	29	433	<10	<10/7270	15/31	

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	S	S	S	S						S	S	S
Aesthetics												NEI
Agriculture					S		S	NS				
Primary Body Contact Recreation									NS			
Public & Private Water Supply				NEI		NEI			NEI			
Fish Consumption				S								

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes

Canadian River at Purcell

Sample Record	Times Visited	Station ID
February 1999 - Current	180	520610010010-001AT

Stream Data

County	McClain	Request Data By Email
Location	East of the Town of Purcell on State Highway 77	
Latitude/Longitude	35.01433266, -97.35035449	
Planning Watershed	Central (8-digit HUC - 11090202)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	160	17.4	18.6	-2.3/34.1	11.0/24.6	
	Turbidity (NTU)	159	128	32	4/>1000	14/122	
	pH (units)	160	8.34	8.25	7.36/9.85	8.06/8.56	
	Dissolved Oxygen (mg/L)	160	10.49	10.20	4.21/26.87	8.36/12.33	
	Hardness (mg/L)	162	421	429	74/990	299/537	
Minerals	Total Dissolved Solids (mg/L)	100	799	782	285/1804	645/960	
	Specific Conductivity (uS/cm)	161	1232	1258	303/2215	908/1577	
	Chloride (mg/L)	165	136	130	20/419	88/180	
	Sulfate (mg/L)	165	278	271	41/972	184/351	
Nutrients	Total Phosphorus (mg/L)	173	0.554	0.440	0.011/2.765	0.282/0.728	
	Total Nitrogen (mg/L)	166	3.04	2.72	0.56/11.87	2.08/3.67	
	Nitrate/Nitrite (mg/L)	167	1.23	0.91	<0.05/9.69	0.21/1.57	
	Chlorophyll A (mg/m^3)	105	61.4	38.1	0.5/211.0	11.9/106.5	TSI=71.0
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	35	2243	345	<10/31700	100/921	
	E. Coli (cfu/100ml)(*-Geo. Mn.)	35	983	41	<10/19863	13/687	

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	S	S	S	S						U	S	S
Aesthetics												NEI
Agriculture					S		S	S				
Primary Body Contact Recreation									S			
Public & Private Water Supply				S		S			S			
Fish Consumption				S								

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes

U = Assessment yielded undetermined supporting status

Canadian River at Taloga

Sample Record	Times Visited	Station ID
November 1998 - 2012	106	520620020010-001AT

Stream Data

County	Dewey	Request Data By Email
Location	North of the Town of Taloga on State Highway 183	
Latitude/Longitude	36.05419703, -98.96894778	
Planning Watershed	West-Central (8-digit HUC - 11090201)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	93	15.2	7.5	0.3/32.3	19.0/26.0	
	Turbidity (NTU)	99	46	10	2/>1000	44/142	
	pH (units)	93	8.08	7.94	6.84/8.67	8.10/8.26	
	Dissolved Oxygen (mg/L)	93	10.24	8.22	3.88/17.75	8.61/10.30	
	Hardness (mg/L)	94	709	560	72/980	304/388	
Minerals	Total Dissolved Solids (mg/L)	53	1367	1245	130/2290	686/802	
	Specific Conductivity (uS/cm)	96	2337	2102	204/4335	1207/1571	
	Chloride (mg/L)	102	343	285	29/1360	234/311	19% of values>OWQS
	Sulfate (mg/L)	103	508	355	<10/261	39/48	
Nutrients	Total Phosphorus (mg/L)	108	0.066	0.016	<0.005/2.050	0.052/0.106	
	Total Nitrogen (mg/L)	103	0.81	0.42	<0.05/6.06	0.61/0.94	
	Nitrate/Nitrite (mg/L)	104	0.27	<0.05	<0.05/1.07	<0.05/0.11	
	Chlorophyll A (mg/m^3)	0	0.0	0.0	<0.1/90.3	3.5/6.8	No Data
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	17	308	<10	<10/93000	106/571	
	E. Coli (cfu/100ml)(*-Geo. Mn.)	17	42	<10	<10/5794	54/139	

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	S	S	S	S						S	S	S
Aesthetics												S
Agriculture					S		NS	S				
Primary Body Contact Recreation									S			
Public & Private Water Supply				S		S			S			
Fish Consumption				S								

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes

Canadian River at Whitefield

Sample Record	Times Visited	Station ID
September 1999 - Current	157	220300000010-001AT

Stream Data

County	Haskell	Request Data by Email
Location	North of the Town of Whitefield on State Highway 2	
Latitude/Longitude	35.26306098, -95.23915454	
Planning Watershed	Lower Arkansas (8-digit HUC - 11090204)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	150	18.4	20.0	1.3/33.0	12.0/25.0	
	Turbidity (NTU)	152	21	6	1/812	4/16	
	pH (units)	149	7.96	7.96	6.39/8.68	7.76/8.20	
	Dissolved Oxygen (mg/L)	149	9.11	9.15	2.25/18.95	7.24/10.94	
	Hardness (mg/L)	150	148	145	43/317	127/161	
Minerals	Total Dissolved Solids (mg/L)	89	224	215	169/480	198/242	
	Specific Conductivity (uS/cm)	149	422	414	197/720	372/479	
	Chloride (mg/L)	156	40	36	14/74	30/48	
	Sulfate (mg/L)	156	45	43	23/100	36/55	
Nutrients	Total Phosphorus (mg/L)	158	0.058	0.045	<0.005/0.950	0.028/0.070	
	Total Nitrogen (mg/L)	157	0.64	0.61	0.21/1.40	0.47/0.78	
	Nitrate/Nitrite (mg/L)	158	0.17	0.14	<0.05/0.56	<0.05/0.25	
	Chlorophyll A (mg/m^3)	81	5.1	4.0	<0.1/28.0	2.6/6.3	TSI=46.6
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	37	217	10	<10/6867	<10/19	
	E. Coli (cfu/100ml)(*-Geo. Mn.)	37	85	23	<10/1860	<10/38	

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	S	S	S	S						U	S	S
Aesthetics												S
Agriculture					S		S	S				
Primary Body Contact Recreation									S			
Public & Private Water Supply				NEI		NEI			NEI			
Fish Consumption				S								

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes

U = Assessment yielded undetermined supporting status

Caney Creek at Barber

Sample Record	Times Visited	Station ID
September 1999 - 2012	145	121700040010-001AT

Stream Data

County	Cherokee	Request Data by Email
Location	North of the Town of Barber off State Highway 100	
Latitude/Longitude	35.72381643, -94.85787184	
Planning Watershed	Lower Arkansas (8-digit HUC - 11110103)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	99	18.1	17.6	4.1/29.3	13.0/23.3	
	Turbidity (NTU)	100	4	2	1/103	1/3	
	pH (units)	97	7.77	7.76	6.46/9.06	7.56/8.02	
	Dissolved Oxygen (mg/L)	99	9.66	9.42	3.94/15.60	8.29/11.12	
	Hardness (mg/L)	99	109	109	64/174	98/120	
Minerals	Total Dissolved Solids (mg/L)	12	149	143	116/237	133/157	
	Specific Conductivity (uS/cm)	99	219	218	123/391	200/243	
	Chloride (mg/L)	90	<10	<10	<10/37	<10/<10	
	Sulfate (mg/L)	90	<10	<10	<10/33	<10/<10	
Nutrients	Total Phosphorus (mg/L)	105	0.060	0.037	<0.005/1.532	0.030/0.047	
	Total Nitrogen (mg/L)	104	1.14	1.05	0.18/7.06	0.71/1.41	
	Nitrate/Nitrite (mg/L)	105	0.99	0.91	0.06/6.68	0.55/1.26	
	Chlorophyll A (mg/m^3)	53	1.3	0.8	<0.1/12.1	0.5/1.2	TSI=32.9
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	46	94	20	<10/1408	<10/52	Mean>OWQS
	E. Coli (cfu/100ml)(*-Geo. Mn.)	46	124	15	<10/2382	<10/41	Mean>OWQS

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chloride	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	S	S	S	S						S	NS	S
Aesthetics												S
Agriculture					S		S	S				
Primary Body Contact Recreation									NS			
Public & Private Water Supply				S		S			S			
Fish Consumption				S								

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes

Caney River at Ramona

Sample Record	Times Visited	Station ID
December 1998 - Current	175	121400010010-001AT

Stream Data

County	Washington	Request Data by Email
Location	Southeast of the Town of Ramona on County Road E0350	
Latitude/Longitude	36.50889974, -95.84265966	
Planning Watershed	Middle Arkansas (8-digit HUC - 11070106)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	158	17.5	18.3	0.8/35.1	10.4/25.5	
	Turbidity (NTU)	161	104	49	6/>1000	27/105	33% of values>OWQS
	pH (units)	158	7.88	7.86	6.65/9.09	7.67/8.06	
	Dissolved Oxygen (mg/L)	158	9.24	8.87	3.46/18.08	7.15/11.13	
	Hardness (mg/L)	159	152	154	<10/358	120/175	
Minerals	Total Dissolved Solids (mg/L)	50	218	221	20/350	168/272	
	Specific Conductivity (uS/cm)	157	376	372	38/989	289/469	
	Chloride (mg/L)	115	38	25	<10/377	14/49	
	Sulfate (mg/L)	115	31	28	<10/112	19/37	
Nutrients	Total Phosphorus (mg/L)	171	0.147	0.121	<0.005/0.726	0.073/0.172	
	Total Nitrogen (mg/L)	170	1.26	1.05	0.26/4.36	0.78/1.38	
	Nitrate/Nitrite (mg/L)	171	0.42	0.28	<0.05/2.90	0.08/0.47	
	Chlorophyll A (mg/m^3)	103	23.3	13.9	0.5/268.0	8.0/27.9	TSI=61.5
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	46	2061	45	<10/87000	20/172	Mean>OWQS
	E. Coli (cfu/100ml)(*-Geo. Mn.)	46	233	52	<10/5475	14/107	

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	NS	S	S	NS						S	S	S
Aesthetics												S
Agriculture					S		S	S				
Primary Body Contact Recreation									NS			
Public & Private Water Supply				NEI		NEI			NEI			
Fish Consumption				S								

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes: *Fish & Wildlife Propagation not supporting for Lead*

Chikaskia River at Blackwell

Sample Record	Times Visited	Station ID
December 1998 - Current	171	621100000010-001AT

Stream Data

County	Kay	Request Data by Email
Location	East of the Town of Blackwell on State Highway 177	
Latitude/Longitude	36.81155311, -97.27808293	
Planning Watershed	Upper Arkansas (8-digit HUC - 11060005)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	162	16.9	17.1	-0.9/34.0	9.4/25.6	
	Turbidity (NTU)	163	124	42	6/>1000	23/96	24% of values>OWQS
	pH (units)	160	8.02	8.05	6.24/9.29	7.83/8.25	
	Dissolved Oxygen (mg/L)	162	10.67	9.58	2.53/48.86	8.24/12.41	
	Hardness (mg/L)	161	369	331	80/3720	248/410	
Minerals	Total Dissolved Solids (mg/L)	97	662	588	195/3840	489/684	
	Specific Conductivity (uS/cm)	162	990	920	33/6238	685/1126	
	Chloride (mg/L)	162	149	119	12/1970	72/158	
	Sulfate (mg/L)	162	121	108	30/765	84/138	
Nutrients	Total Phosphorus (mg/L)	170	0.207	0.155	0.013/1.240	0.089/0.263	
	Total Nitrogen (mg/L)	161	1.80	1.74	0.48/6.63	1.23/2.23	
	Nitrate/Nitrite (mg/L)	162	0.91	0.81	<0.05/3.09	0.29/1.31	
	Chlorophyll A (mg/m^3)	101	19.3	11.8	<0.1/138.0	4.8/28.3	TSI=59.7
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	34	5317	156	20/147000	52/1700	Mean>OWQS
	E. Coli (cfu/100ml)(*-Geo. Mn.)	34	331	20	<10/3968	<10/256	

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	NS	S	S	S						S	S	S
Aesthetics												S
Agriculture					S		S	S				
Primary Body Contact Recreation									NS			
Public & Private Water Supply				NEI		NEI			NEI			
Fish Consumption				NS								

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes

Chikaskia River at Tonkawa

Sample Record	Times Visited	Station ID
March 2013 - Current	50	621100000010-002RS

Stream Data

County	Kay	Request Data by Email
Location	Northeast of the Town of Tonkawa off State Highway 60	
Latitude/Longitude	36.637358, -97.23295	
Planning Watershed	Upper Arkansas (8-digit HUC - 11060005)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	50	17.3	19.8	0.0/28.5	10.0/25.8	
	Turbidity (NTU)	50	127	36	6/>1000	12/116	24% of values>OWQS
	pH (units)	50	8.03	8.06	6.79/8.62	7.88/8.30	
	Dissolved Oxygen (mg/L)	50	9.73	9.11	3.70/14.70	7.25/12.16	
	Hardness (mg/L)	47	341	335	89/536	266/456	
Minerals	Total Dissolved Solids (mg/L)	45	565	560	220/886	452/679	
	Specific Conductivity (uS/cm)	49	1005	1000	191/4588	715/1162	
	Chloride (mg/L)	45	118	124	<10/238	76/155	
	Sulfate (mg/L)	45	138	133	63/257	103/168	
Nutrients	Total Phosphorus (mg/L)	45	0.239	0.156	0.027/1.113	0.068/0.300	
	Total Nitrogen (mg/L)	45	1.61	1.37	0.68/3.71	1.07/1.88	
	Nitrate/Nitrite (mg/L)	45	0.51	0.53	<0.05/1.28	<0.05/0.96	
	Chlorophyll A (mg/m^3)	45	26.1	26.3	3.0/111.0	10.0/38.2	TSI=62.6
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	6	836	58	31/2420	31/2420	Mean > OWQS
	E. Coli (cfu/100ml)(*-Geo. Mn.)	6	154	1	<10/461	<10/461	

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	NS	S	S	S						S	NEI	S
Aesthetics												NEI
Agriculture					S		S	S				
Primary Body Contact Recreation									NS			
Public & Private Water Supply				S		S			S			
Fish Consumption				NS								

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes

Cimarron River at Ames

Sample Record	Times Visited	Station ID
March 2003 - Current	129	620910020010-004RS

Stream Data

County	Major	Request Data by Email
Location	West of the Town of Ames off State Highway 8	
Latitude/Longitude	36.27979304, -98.31895336	
Planning Watershed	Central (8-digit HUC - 11050002)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	119	18.0	18.6	-0.9/39.2	10.5/25.3	
	Turbidity (NTU)	122	40	7	1/>1000	4/15	
	pH (units)	119	8.07	8.08	7.40/8.57	7.96/8.21	
	Dissolved Oxygen (mg/L)	119	10.51	10.50	5.07/21.06	8.93/11.89	
	Hardness (mg/L)	120	1023	1049	422/1815	810/1219	
Minerals	Total Dissolved Solids (mg/L)	78	10045	8985	2050/21700	6510/12450	
	Specific Conductivity (uS/cm)	119	16442	15637	3765/36987	10722/22359	
	Chloride (mg/L)	120	5407	4620	181/13700	3200/7635	21% of values>OWQS
	Sulfate (mg/L)	120	791	783	300/3210	640/904	35% of values>OWQS
Nutrients	Total Phosphorus (mg/L)	120	0.051	0.027	<0.005/0.705	0.016/0.042	
	Total Nitrogen (mg/L)	121	0.94	0.88	<0.10/2.69	0.69/1.15	
	Nitrate/Nitrite (mg/L)	120	0.30	0.21	<0.05/1.13	<0.05/0.41	
	Chlorophyll A (mg/m^3)	84	15.1	11.1	1.2/64.9	6.6/22.4	TSI=57.2
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	35	250	52	<10/1203	<10/211	
	E. Coli (cfu/100ml)(*-Geo. Mn.)	35	1111	813	20/3255	228/2420	Mean>OWQS

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	S	S	S	NS						NS	S	S
Aesthetics												S
Agriculture					NS		NS	NS				
Primary Body Contact Recreation									NS			
Public & Private Water Supply				NEI		NEI			NEI			
Fish Consumption				S								

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes

Fish & Wildlife Propagation not supporting for Selenium

Cimarron River at Buffalo

Sample Record	Times Visited	Station ID
November 1998 - 2012	123	620920030010-001AT

Stream Data

County	Woods	Request Data by Email
Location	East of the Town of Buffalo on State Highway 34	
Latitude/Longitude	36.85209062, -99.31622871	
Planning Watershed	Panhandle (8-digit HUC - 11050001)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	110	18.1	9.8	-1.0/36.2	17.9/26.5	
	Turbidity (NTU)	112	23	4	2/715	8/18	
	pH (units)	109	8.06	7.89	7.17/8.70	8.10/8.26	
	Dissolved Oxygen (mg/L)	107	9.76	8.01	0.67/23.17	9.30/11.43	
	Hardness (mg/L)	109	1002	640	119/7000	800/1236	
Minerals	Total Dissolved Solids (mg/L)	49	10596	4129	1746/40000	6060/12750	16% of values>OWQS
	Specific Conductivity (uS/cm)	110	15831	7712	2030/61252	12466/19014	
	Chloride (mg/L)	110	5073	2220	630/24100	3890/5956	20% of values>OWQS
	Sulfate (mg/L)	110	613	366	196/1620	498/790	
Nutrients	Total Phosphorus (mg/L)	110	0.080	0.035	<0.005/0.392	0.054/0.096	
	Total Nitrogen (mg/L)	109	0.77	0.46	0.23/2.59	0.63/0.97	
	Nitrate/Nitrite (mg/L)	110	0.20	<0.05	<0.05/1.85	<0.05/0.21	
	Chlorophyll A (mg/m^3)	0	0.0	0.0	0.0/0.0	0.0/0.0	No Data
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	22	1160	38	<10/11000	155/1500	Mean>OWQS
	E. Coli (cfu/100ml)(*-Geo. Mn.)	22	5818	414	<10/24199	4242/7817	Mean>OWQS

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	S	S	S	S						NS	NS	NS
Aesthetics												S
Agriculture					S		NS	NS				
Primary Body Contact Recreation									NS			
Public & Private Water Supply				S		S			S			
Fish Consumption				S								

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes

Cimarron River at Dover

Sample Record	Times Visited	Station ID
December 1998 - 2012	138	620910020010-001AT

Stream Data

County	Kingfisher	Request Data by Email
Location	South of the Town of Dover on US 81	
Latitude/Longitude	35.95153084, -97.91407037	
Planning Watershed	Central (8-digit HUC -11050002)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	117	17.7	9.7	-0.3/37.7	17.5/25.3	
	Turbidity (NTU)	121	135	11	3/>1000	20/84	
	pH (units)	117	8.04	7.91	7.00/8.56	8.08/8.20	
	Dissolved Oxygen (mg/L)	116	10.09	8.27	4.73/20.53	9.78/11.89	
	Hardness (mg/L)	119	833	632	100/2160	836/997	
Minerals	Total Dissolved Solids (mg/L)	52	6130	3698	305/12300	6244/8555	
	Specific Conductivity (uS/cm)	117	11376	7765	134/28860	11352/14832	
	Chloride (mg/L)	118	3461	2165	47/10300	2949/4785	
	Sulfate (mg/L)	119	611	489	96/1025	639/741	
Nutrients	Total Phosphorus (mg/L)	119	0.195	0.051	<0.005/2.350	0.084/0.197	
	Total Nitrogen (mg/L)	118	1.27	0.81	0.53/5.72	1.09/1.47	
	Nitrate/Nitrite (mg/L)	119	0.43	0.09	<0.05/1.73	0.29/0.71	
	Chlorophyll A (mg/m^3)	37	19.2	5.6	1.3/46.5	18.7/31.3	TSI=59.6
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	27	4634	<10	<10/87000	60/600	Mean>OWQS
	E. Coli (cfu/100ml)(*-Geo. Mn.)	27	1390	183	<10/9208	487/1483	Mean>OWQS

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	S	S	S	NS						U	S	S
Aesthetics												S
Agriculture					S		S	S				
Primary Body Contact Recreation									NS			
Public & Private Water Supply				S		S			S			
Fish Consumption				S								

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes

Fish & Wildlife Propagation not supporting for Selenium
U = Assessment yielded undetermined supporting status

Cimarron River at Guthrie

Sample Record	Times Visited	Station ID
December 1998 - Current	174	620910010010-001AT

Stream Data

County	Logan	Request Data by Email
Location	North of the Town of Guthrie on US 77	
Latitude/Longitude	35.91981845, -97.4257038	
Planning Watershed	Central (8-digit HUC -11050002)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	163	17.8	17.4	-1.1/37.3	10.0/26.0	
In-Situ	Turbidity (NTU)	165	132	33	6/>1000	16/79	16% of values>OWQS
In-Situ	pH (units)	163	8.14	8.14	7.06/9.72	7.93/8.33	
In-Situ	Dissolved Oxygen (mg/L)	162	9.97	9.79	4.55/18.09	8.37/11.62	
In-Situ	Hardness (mg/L)	162	649	610	196/1890	500/774	
Minerals	Total Dissolved Solids (mg/L)	101	4383	4400	1108/9510	3122/5305	
Minerals	Specific Conductivity (uS/cm)	160	8083	7678	704/19499	5517/10419	
Minerals	Chloride (mg/L)	169	2268	2219	91/6500	1440/2689	
Minerals	Sulfate (mg/L)	168	441	451	115/851	335/545	
Nutrients	Total Phosphorus (mg/L)	169	0.405	0.326	0.029/1.580	0.240/0.506	
Nutrients	Total Nitrogen (mg/L)	168	2.13	1.87	0.58/6.40	1.52/2.36	
Nutrients	Nitrate/Nitrite (mg/L)	169	1.10	0.95	<0.05/4.99	0.49/1.44	
Nutrients	Chlorophyll A (mg/m^3)	105	29.7	26.1	0.3/86.2	14.7/41.6	TSI=63.9
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	32	1469	149	<10/18000	51/1925	Mean>OWQS
Bacteria	E. Coli (cfu/100ml)(*-Geo. Mn.)	32	321	121	<10/2415	51/510	Mean>OWQS

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	NS	S	S	S						U	S	S
Aesthetics												NEI
Agriculture					S		S	S				
Primary Body Contact Recreation									NS			
Public & Private Water Supply				S		S			S			
Fish Consumption				S								

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes

U = Assessment yielded undetermined supporting status

Sampling and Assessment by the **Oklahoma Water Resources Board** – 3800 Classen Blvd, Oklahoma City, OK, 73118 – 405.530.8800 – http://www.owrb.ok.gov

Cimarron River at Mocane

Sample Record	Times Visited	Station ID
October 1999 - Current	158	620930000010-001AT

Stream Data

County	Beaver	Request Data by Email
Location	North of the Town of Mocane off of US 64	
Latitude/Longitude	36.97516467, -100.3141738	
Planning Watershed	Panhandle (8-digit HUC -11040006)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	154	17.9	18.0	-0.6/34.9	10.4/24.9	
	Turbidity (NTU)	156	24	13	3/>1000	6/23	
	pH (units)	148	8.29	8.29	7.64/9.40	8.10/8.49	
	Dissolved Oxygen (mg/L)	154	10.17	9.70	5.25/21.82	8.55/11.42	
	Hardness (mg/L)	154	482	478	47/840	422/540	
Minerals	Total Dissolved Solids (mg/L)	93	2851	2860	2224/3610	2605/3070	
	Specific Conductivity (uS/cm)	154	4604	4553	405/8438	4259/5124	
	Chloride (mg/L)	150	1405	1380	184/2347	1222/1630	
	Sulfate (mg/L)	151	210	207	96/339	194/230	
Nutrients	Total Phosphorus (mg/L)	152	0.293	0.216	<0.005/1.320	0.063/0.492	
	Total Nitrogen (mg/L)	153	1.58	1.14	<0.10/6.10	0.68/2.35	
	Nitrate/Nitrite (mg/L)	152	0.86	0.28	<0.05/5.48	<0.05/1.34	
	Chlorophyll A (mg/m^3)	67	23.6	8.7	1.6/441.0	5.4/14.0	TSI=61.6
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	34	864	158	<10/9000	49/816	Mean>OWQS
	E. Coli (cfu/100ml)(*-Geo. Mn.)	34	309	102	<10/1986	39/230	

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	S	S	S	NS						S	NS	S
Aesthetics												S
Agriculture					S		S	S				
Primary Body Contact Recreation									NS			
Public & Private Water Supply				NEI		NEI			NEI			
Fish Consumption				S								

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes: *Fish & Wildlife Propagation not supporting for Selenium*

Cimarron River at Oilton

Sample Record	Times Visited	Station ID
December 1998 - 2012	136	620900010170-001AT

Stream Data

County	Creek	Request Data by Email
Location	North of the Town of Oilton off State Highway 99	
Latitude/Longitude	36.09442186, -96.5787792	
Planning Watershed	Upper Arkansas (8-digit HUC - 11050003)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	121	17.7	9.2	1.7/32.6	21.0/27.0	
	Turbidity (NTU)	120	207	25	7/194	22/44	35% of values>OWQS
	pH (units)	120	8.22	7.95	6.87/8.97	7.82/8.08	13% of values>OWQS
	Dissolved Oxygen (mg/L)	121	9.81	7.25	5.35/16.48	8.85/10.69	
	Hardness (mg/L)	119	481	330	39/658	139/180	
Minerals	Total Dissolved Solids (mg/L)	52	2820	1680	146/536	310/389	
	Specific Conductivity (uS/cm)	121	5092	2842	195/1333	576/734	
	Chloride (mg/L)	116	1463	848	13/293	93/134	
	Sulfate (mg/L)	118	314	215	22/116	51/62	
Nutrients	Total Phosphorus (mg/L)	119	0.365	0.176	0.051/0.330	0.113/0.137	
	Total Nitrogen (mg/L)	117	1.96	1.29	0.45/2.82	0.92/1.12	
	Nitrate/Nitrite (mg/L)	119	0.46	<0.05	<0.05/1.17	0.24/0.46	
	Chlorophyll A (mg/m^3)	36	47.0	15.4	<0.1/71.8	12.7/15.9	TSI=68.4
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	28	738	30	<10/12000	<10/20	Mean>OWQS
	E. Coli (cfu/100ml)(*-Geo. Mn.)	28	162	<10	<10/2035	<10/18	

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	NS	NS	S	S						NS	S	S
Aesthetics												NEI
Agriculture					S		S	S				
Primary Body Contact Recreation									NS			
Public & Private Water Supply				S		S			S			
Fish Consumption				NS								

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes: *Fish Consumption not supporting for Lead*

Cimarron River at Ripley

Sample Record	Times Visited	Station ID
October 2000 - Current	156	620900030010-001AT

Stream Data

County	Payne	Request Data by Email
Location	South of the Town of Ripley on State Highway 33	
Latitude/Longitude	35.98570275, -96.91305015	
Planning Watershed	Upper Arkansas (8-digit HUC - 11050003)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	142	17.8	18.8	-1.0/35.5	9.1/26.4	
In-Situ	Turbidity (NTU)	143	176	38	5/>1000	15/125	
In-Situ	pH (units)	141	8.28	8.33	7.15/9.18	7.95/8.60	
In-Situ	Dissolved Oxygen (mg/L)	142	10.43	9.88	4.16/19.26	7.81/12.95	
In-Situ	Hardness (mg/L)	143	520	521	142/1050	409/632	
Minerals	Total Dissolved Solids (mg/L)	86	3674	3790	470/7500	2370/4933	
Minerals	Specific Conductivity (uS/cm)	142	6133	5826	465/13560	3814/8374	
Minerals	Chloride (mg/L)	150	1855	1805	168/4490	1138/2463	
Minerals	Sulfate (mg/L)	149	335	338	61/660	254/421	
Nutrients	Total Phosphorus (mg/L)	150	0.377	0.301	0.112/1.370	0.226/0.455	
Nutrients	Total Nitrogen (mg/L)	149	1.98	1.70	0.83/6.62	1.38/2.26	
Nutrients	Nitrate/Nitrite (mg/L)	150	0.53	0.31	<0.05/4.96	<0.05/0.91	
Nutrients	Chlorophyll A (mg/m^3)	91	60.4	46.0	0.7/474.0	26.9/82.2	TSI=71
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	40	567	120	<10/4000	30/400	Mean>OWQS
Bacteria	E. Coli (cfu/100ml)(*-Geo. Mn.)	40	342	26	<10/3654	<10/186	

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	NS	S	S	S						S	S	S
Aesthetics												NEI
Agriculture					S		S	S				
Primary Body Contact Recreation									NS			
Public & Private Water Supply				S		S			S			
Fish Consumption				NS								

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes: *Fish Consumption not supporting for Lead*

Cimarron River at Waynoka

Sample Record	Times Visited	Station ID
March 2003 - Current	106	620920020010-001RS

Stream Data

County	Woods	Request Data by Email
Location	South of the Town of Waynoka on State Highway 281	
Latitude/Longitude	36.516709, -98.87990179	
Planning Watershed	Central (8-digit HUC - 11050001)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	103	19.4	18.7	-1.5/37.4	12.8/27.4	
In-Situ	Turbidity (NTU)	104	31	5	1/>1000	3/12	
In-Situ	pH (units)	101	7.93	7.92	7.28/8.35	7.82/8.06	
In-Situ	Dissolved Oxygen (mg/L)	102	8.83	8.48	3.70/13.52	7.77/9.74	
In-Situ	Hardness (mg/L)	103	1661	1460	162/9160	1150/1756	
Minerals	Total Dissolved Solids (mg/L)	70	27035	25750	8450/55400	17625/35100	88% of values>OWQS
Minerals	Specific Conductivity (uS/cm)	103	38205	36568	7575/74949	27221/48590	
Minerals	Chloride (mg/L)	104	13929	12650	804/31900	8780/19150	74% of values>OWQS
Minerals	Sulfate (mg/L)	104	1081	1065	426/1760	903/1240	
Nutrients	Total Phosphorus (mg/L)	102	0.043	0.026	<0.005/0.625	0.012/0.038	
Nutrients	Total Nitrogen (mg/L)	105	0.59	0.54	<0.10/1.99	0.42/0.69	
Nutrients	Nitrate/Nitrite (mg/L)	104	0.07	0.05	<0.05/0.99	<0.05/0.05	
Nutrients	Chlorophyll A (mg/m^3)	62	6.3	4.5	0.8/26.7	2.5/7.8	TSI=48.7
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	20	301	60	<10/1300	13/175	
Bacteria	E. Coli (cfu/100ml)(*-Geo. Mn.)	20	1416	1011	52/7270	579/1728	Mean>OWQS

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	S	S	S	NS						NS	S	S
Aesthetics												S
Agriculture					S		NS	NS				
Primary Body Contact Recreation									NS			
Public & Private Water Supply				NEI		NEI			NEI			
Fish Consumption				NS								

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes

Fish & Wildlife Propagation not supporting for Selenium
Fish Consumption not supporting for Mercury

Clear Boggy Creek at Caney

Sample Record	Times Visited	Station ID
November 1998 - Current	177	410400030010-001AT

Stream Data

County	Atoka	Request Data by Email
Location	North of the Town of Caney on US 69	
Latitude/Longitude	34.25148276, -96.2052689	
Planning Watershed	Blue-Boggy (8-digit HUC -11140104)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	161	18.2	18.0	1.0/32.5	12.0/25.5	
	Turbidity (NTU)	163	93	41	4/>1000	16/81	
	pH (units)	160	7.93	8.00	6.48/9.32	7.74/8.13	
	Dissolved Oxygen (mg/L)	161	8.76	8.45	4.73/22.11	6.94/9.96	
	Hardness (mg/L)	162	204	206	<10/329	167/254	
Minerals	Total Dissolved Solids (mg/L)	49	302	270	<10/843	223/326	
	Specific Conductivity (uS/cm)	160	458	452	117/1295	346/556	
	Chloride (mg/L)	114	39	24	<10/416	14/38	
	Sulfate (mg/L)	114	31	29	<10/101	24/35	
Nutrients	Total Phosphorus (mg/L)	168	0.156	0.093	<0.005/1.081	0.058/0.147	
	Total Nitrogen (mg/L)	166	0.77	0.59	<0.05/3.39	0.41/0.92	
	Nitrate/Nitrite (mg/L)	166	0.13	<0.05	<0.05/1.19	<0.05/0.16	
	Chlorophyll A (mg/m^3)	49	5.2	4.3	0.9/18.2	2.2/7.4	TSI=46.7
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	39	869	150	<10/5000	30/1733	
	E. Coli (cfu/100ml)(*-Geo. Mn.)	39	454	74	<10/2420	20/488	

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	NS	S	S	NS						S	NS	NS
Aesthetics												S
Agriculture					S		S	S				
Primary Body Contact Recreation									S			
Public & Private Water Supply				NEI		NEI			NEI			
Fish Consumption				NS								

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes

Fish & Wildlife Propagation and Fish Consumption not supporting for Lead

Sampling and Assessment by the **Oklahoma Water Resources Board** – 3800 Classen Blvd, Oklahoma City, OK, 73118 – 405.530.8800 – http://www.owrb.ok.gov

Cow Creek at Waurika

Sample Record	Times Visited	Station ID
December 1998 - Current	87	311200000060-001AT

Stream Data

County	Jefferson	Request Data by Email
Location	North of Waurika off State Highway 81	
Latitude/Longitude	34.169208, -98.004862	
Planning Watershed	Northern Beaver (8-digit HUC - 11130208)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	84	18.4	19.3	3.6/31.5	11.1/26.5	
	Turbidity (NTU)	85	113	55	19/736	43/118	
	pH (units)	84	8.04	8.05	7.35/9.06	7.79/8.29	
	Dissolved Oxygen (mg/L)	84	7.83	7.28	2.63/12.79	6.15/9.55	
	Hardness (mg/L)	87	271	267	62/556	196/342	
Minerals	Total Dissolved Solids (mg/L)	66	490	528	136/1066	293/635	
	Specific Conductivity (uS/cm)	84	877	876	157/1820	527/1162	
	Chloride (mg/L)	87	109	93	12/1145	43/129	
	Sulfate (mg/L)	87	99	92	24/521	57/116	
Nutrients	Total Phosphorus (mg/L)	87	0.893	0.578	0.140/5.553	0.389/1.270	
	Total Nitrogen (mg/L)	87	4.27	2.28	0.68/16.96	1.48/4.83	
	Nitrate/Nitrite (mg/L)	87	3.04	0.93	<0.05/15.50	0.45/3.84	
	Chlorophyll A (mg/m^3)	47	16.7	12.3	0.8/82.6	3.4/24.1	TSI=58.2
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	14	1274	380	130/8000	201/488	
	E. Coli (cfu/100ml)(*-Geo. Mn.)	14	374	115	20/1733	49/343	

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	NS	S	S	S						NEI	S	NS
Aesthetics												NEI
Agriculture					S		S	S				
Primary Body Contact Recreation									NEI			
Public & Private Water Supply				NEI		NEI			NEI			
Fish Consumption				NS								

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes: *Fish Consumption not supporting for Lead*

Deep Fork River at Beggs

Sample Record	Times Visited	Station ID
November 1998 - Current	170	520700020010-001AT

Stream Data

County	Okmulgee	Request Data By Email
Location	South of the Town of Beggs off State Highway 16	
Latitude/Longitude	35.67424336, -96.06876654	
Planning Watershed	Eufaula (8-digit HUC -11100303)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	155	17.7	18.4	0.7/33.0	10.0/25.4	
	Turbidity (NTU)	156	166	79	7/>1000	47/215	
	pH (units)	156	7.86	7.84	6.82/9.06	7.63/8.06	
	Dissolved Oxygen (mg/L)	155	8.54	7.94	3.73/17.19	6.52/10.26	
	Hardness (mg/L)	153	227	213	27/1500	168/278	
Minerals	Total Dissolved Solids (mg/L)	105	382	360	50/765	274/482	
	Specific Conductivity (uS/cm)	155	679	655	90/1469	437/899	
	Chloride (mg/L)	165	100	92	<10/273	53/141	
	Sulfate (mg/L)	165	47	44	<10/129	33/59	
Nutrients	Total Phosphorus (mg/L)	164	0.173	0.153	0.014/0.790	0.098/0.218	
	Total Nitrogen (mg/L)	164	1.19	0.99	<0.05/3.53	0.74/1.63	
	Nitrate/Nitrite (mg/L)	165	0.30	0.21	<0.05/2.87	<0.05/0.43	
	Chlorophyll A (mg/m^3)	65	24.7	12.8	2.2/138.0	7.3/28.1	TSI=62.0
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	38	3519	151	<10/113000	41/770	Mean>OWQS
	E. Coli (cfu/100ml)(*-Geo. Mn.)	38	587	47	<10/14136	<10/201	

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	NS	S	S	S						NS	S	S
Aesthetics												NEI
Agriculture					S		S	S				
Primary Body Contact Recreation									NS			
Public & Private Water Supply				NEI		NEI			NEI			
Fish Consumption				NS								

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes *Fish Consumption impaired for Lead*

Deep Fork River at Stroud

Sample Record	Times Visited	Station ID
November 1998 – December 2012	136	520700040010-001AT

Stream Data

County	Lincoln	Request Data By Email
Location	South of the Town of Stroud on US 377	
Latitude/Longitude	35.68609365, -96.6622792	
Planning Watershed	Central (8-digit HUC -11100303)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	110	17.8	11.0	0.5/30.6	18.4/25.1	
In-Situ	Turbidity (NTU)	108	165	14	8/473	50/94	
In-Situ	pH (units)	110	8.21	8.04	7.42/9.17	8.15/8.61	
In-Situ	Dissolved Oxygen (mg/L)	110	9.15	7.63	2.89/25.19	7.37/11.06	
In-Situ	Hardness (mg/L)	110	263	196	94/500	254/352	
Minerals	Total Dissolved Solids (mg/L)	54	455	326	125/1590	454/730	
Minerals	Specific Conductivity (uS/cm)	110	803	549	214/3476	877/1417	
Minerals	Chloride (mg/L)	114	111	54	12/666	100/180	
Minerals	Sulfate (mg/L)	114	54	35	41/296	94/154	
Nutrients	Total Phosphorus (mg/L)	122	0.295	0.150	0.069/1.410	0.447/0.586	
Nutrients	Total Nitrogen (mg/L)	113	1.23	0.65	0.87/14.26	2.36/3.66	
Nutrients	Nitrate/Nitrite (mg/L)	114	0.37	<0.05	<0.05/11.80	0.33/1.47	
Nutrients	Chlorophyll A (mg/m^3)	16	11.0	2.2	<0.1/455.0	49.3/184.3	TSI=54.1
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	28	818	89	108/980	394/488	Mean>OWQS
Bacteria	E. Coli (cfu/100ml)(*-Geo. Mn.)	28	202	20	<10/517	144/249	

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	S	S	S	S						S	S	S
Aesthetics												NEI
Agriculture					S		S	S				
Primary Body Contact Recreation									NS			
Public & Private Water Supply				NEI		NEI			NEI			
Fish Consumption				S								

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes

Deep Red Creek at Randlett

Sample Record	Times Visited	Station ID
January 2013 - Current	29	311310030010-001AT

Stream Data

County	Cotton	Request Data By Email
Location	North of the Town of Randlett on US 277	
Latitude/Longitude	34.220833, -98.452778	
Planning Watershed	West Cache (8-digit HUC -11130203)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	29	19.1	20.0	4.9/29.5	14.6/26.1	
In-Situ	Turbidity (NTU)	29	253	183	28/825	90/287	
In-Situ	pH (units)	29	8.16	8.13	7.64/8.87	7.86/8.37	
In-Situ	Dissolved Oxygen (mg/L)	29	7.54	7.94	3.60/10.70	5.45/9.39	
In-Situ	Hardness (mg/L)	29	200	166	75/840	131/250	
Minerals	Total Dissolved Solids (mg/L)	29	470	310	240/2530	278/593	
Minerals	Specific Conductivity (uS/cm)	29	722	451	249/4141	363/761	
Minerals	Chloride (mg/L)	29	118	41	16/992	25/185	
Minerals	Sulfate (mg/L)	29	86	73	27/448	35/91	
Nutrients	Total Phosphorus (mg/L)	29	0.253	0.192	0.050/0.550	0.130/0.380	
Nutrients	Total Nitrogen (mg/L)	29	1.80	1.55	0.89/2.85	1.43/2.45	
Nutrients	Nitrate/Nitrite (mg/L)	29	0.27	0.20	<0.05/1.22	<0.05/0.41	
Nutrients	Chlorophyll A (mg/m^3)	29	19.8	21.3	3.4/42.9	6.0/29.1	TSI=59.9
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	10	1396	727	687/2420	717/2420	
Bacteria	E. Coli (cfu/100ml)(*-Geo. Mn.)	10	672	148	129/2420	143/993	

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	NS	S	S	S						S	S	S
Aesthetics												NEI
Agriculture					S		S	NS				
Primary Body Contact Recreation									NEI			
Public & Private Water Supply				NEI		NEI			NEI			
Fish Consumption				S								

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes

East Cache Creek at Walters

Sample Record	Times Visited	Station ID
November 1998 - Current	169	311300010020-001AT

Stream Data

County	Cotton	Request Data By Email
Location	East of the Town of Walters on State Highway 53	
Latitude/Longitude	34.36188194, -98.28233417	
Planning Watershed	Beaver-Cache (8-digit HUC -11130202)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	158	18.2	18.8	2.1/35.4	11.2/26.1	
In-Situ	Turbidity (NTU)	159	87	56	5/809	27/91	
In-Situ	pH (units)	157	7.93	7.88	7.37/8.64	7.72/8.11	
In-Situ	Dissolved Oxygen (mg/L)	158	8.39	7.72	3.39/16.10	6.52/10.40	
In-Situ	Hardness (mg/L)	159	219	207	95/638	175/248	
Minerals	Total Dissolved Solids (mg/L)	102	478	469	154/916	378/596	
Minerals	Specific Conductivity (uS/cm)	157	760	759	160/1893	587/898	
Minerals	Chloride (mg/L)	167	75	79	<10/194	46/93	
Minerals	Sulfate (mg/L)	167	97	92	31/326	70/116	
Nutrients	Total Phosphorus (mg/L)	167	1.029	0.955	0.047/3.580	0.489/1.430	
Nutrients	Total Nitrogen (mg/L)	167	4.43	4.15	0.68/11.80	2.05/5.72	
Nutrients	Nitrate/Nitrite (mg/L)	167	3.10	2.62	<0.05/9.93	0.99/4.39	
Nutrients	Chlorophyll A (mg/m^3)	61	15.2	8.4	1.0/77.7	5.3/17.6	TSI=57.3
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	36	2130	700	109/43000	257/1120	Mean>OWQS
Bacteria	E. Coli (cfu/100ml)(*-Geo. Mn.)	36	330	158	<10/4352	74/395	

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	NS	S	S	NS						S	S	S
Aesthetics												NEI
Agriculture					S		S	S				
Primary Body Contact Recreation									NS			
Public & Private Water Supply				NEI		NEI			NEI			
Fish Consumption				S								

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes: *Fish & Wildlife Propagation not supporting for Selenium*

Elk River at Tiff City (MO)

Sample Record	Times Visited	Station ID
May 1999 – December 2012	138	121600030440-001AT

Stream Data

County	McDonald	Request Data By Email
Location	Southeast of the Town of Tiff City (MO) on SH 43	
Latitude/Longitude	36.6314, -94.5867	
Planning Watershed	Grand (8-digit HUC -11070208)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	114	17.5	11.2	0.5/33.5	19.2/26.2	
	Turbidity (NTU)	114	4	2	1/347	8/13	
	pH (units)	113	7.95	7.74	4.73/9.04	7.09/7.58	
	Dissolved Oxygen (mg/L)	114	9.63	7.68	3.66/19.00	8.67/10.45	
	Hardness (mg/L)	113	139	127	<10/135	<10/15	
Minerals	Total Dissolved Solids (mg/L)	20	176	164	14/72	38/47	
	Specific Conductivity (uS/cm)	113	291	261	<10/180	37/43	
	Chloride (mg/L)	100	<10	<10	<10/28	<10/<10	
	Sulfate (mg/L)	100	<10	<10	<10/30	<10/<10	
Nutrients	Total Phosphorus (mg/L)	114	0.101	0.031	<0.005/0.281	0.020/0.029	
	Total Nitrogen (mg/L)	113	1.80	1.13	<0.10/2.11	0.43/0.57	
	Nitrate/Nitrite (mg/L)	114	1.59	0.94	<0.01/1.46	<0.05/0.19	
	Chlorophyll A (mg/m^3)	58	2.5	0.6	0.1/15.8	1.9/3.3	TSI=39.7
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	32	113	<10	<10/57000	<10/93	
	E. Coli (cfu/100ml)(*-Geo. Mn.)	32	80	<10	<10/2420	<10/69	

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	S	S	S	S						S	S	S
Aesthetics												S
Agriculture					S		S	S				
Primary Body Contact Recreation									S			
Public & Private Water Supply				NEI		NEI			NEI			
Fish Consumption				S								

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes

Elk Creek at Roosevelt

Sample Record	Times Visited	Station ID
March 2006 - Current	130	311500030010-002AT

Stream Data

County	Kiowa	Request Data By Email
Location	West of the Town of Roosevelt off State Highway 19	
Latitude/Longitude	34.91426897, -99.1137584	
Planning Watershed	Southwest (8-digit HUC -11120303)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	118	17.7	19.1	-0.7/31.1	9.4/25.4	
	Turbidity (NTU)	123	102	37	3/>1000	22/72	
	pH (units)	117	8.16	8.18	7.45/8.55	8.07/8.28	
	Dissolved Oxygen (mg/L)	118	9.58	9.07	3.58/17.43	6.87/12.22	
	Hardness (mg/L)	123	752	755	212/1980	508/940	
Minerals	Total Dissolved Solids (mg/L)	127	1198	1200	200/2960	820/1520	
	Specific Conductivity (uS/cm)	119	1697	1761	375/3098	1242/2121	
	Chloride (mg/L)	129	141	131	24/428	100/164	
	Sulfate (mg/L)	129	501	486	67/1070	290/679	
Nutrients	Total Phosphorus (mg/L)	88	0.136	0.112	<0.005/0.614	0.072/0.169	
	Total Nitrogen (mg/L)	90	1.40	1.30	<0.10/2.58	0.97/1.77	
	Nitrate/Nitrite (mg/L)	89	0.34	0.05	<0.05/1.85	<0.05/0.62	
	Chlorophyll A (mg/m^3)	61	32.3	28.2	0.4/91.7	13.4/44.4	TSI=64.7
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	15	433	63	<10/2420	41/233	Mean>OWQS
	E. Coli (cfu/100ml)(*-Geo. Mn.)	15	305	62	<10/1733	23/247	

Beneficial Uses

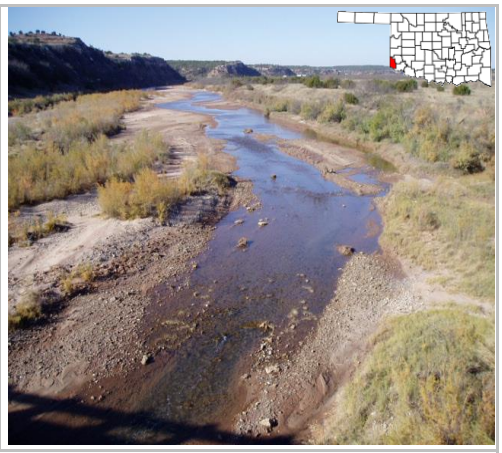
Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	NS	S	S	NS						S	NS	S
Aesthetics												NEI
Agriculture					S		S	S				
Primary Body Contact Recreation									NS			
Public & Private Water Supply				NEI		NEI			NEI			
Fish Consumption				S								

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes

Fish & Wildlife Propagation not supporting for Selenium

Elm Fork of the Red River at Carl



Sample Record	Times Visited	Station ID
May 2006 - Current	142	311800000010-002RS

Stream Data

County	Harmon	Request Data By Email
Location	North of the Town of Carl on State Highway 30	
Latitude/Longitude	35.011719, -99.903717	
Planning Watershed	Southwest (8-digit HUC -11120304)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	131	20.6	13.7	-0.9/37.6	22.7/28.8	
	Turbidity (NTU)	136	56	3	1/>1000	5/8	
	pH (units)	130	7.78	7.61	6.80/8.54	7.88/8.03	
	Dissolved Oxygen (mg/L)	132	7.42	5.31	0.91/13.18	7.77/9.47	
	Hardness (mg/L)	138	4581	2628	856/13670	3545/5480	
Minerals	Total Dissolved Solids (mg/L)	140	58373	18825.0	900/270000	30100/70400	
	Specific Conductivity (uS/cm)	132	72553	29362.50	1678/235299	46775/110593	
	Chloride (mg/L)	142	33790	8457.50	313/181000	15400/41400	
	Sulfate (mg/L)	141	3682	1640.00	138/231001	2000/2365	
Nutrients	Total Phosphorus (mg/L)	81	0.036	<0.005	<0.005/0.945	0.007/0.016	
	Total Nitrogen (mg/L)	89	1.66	1.11	<0.05/4.78	1.40/2.06	
	Nitrate/Nitrite (mg/L)	88	0.31	0.10	<0.05/1.48	0.20/0.43	
	Chlorophyll A (mg/m^3)	51	3.3	1.5	<0.1/21.9	2.3/3.0	TSI=42.2
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	10	485	<10	<10/2420	<10/606	
	E. Coli (cfu/100ml)(*-Geo. Mn.)	10	<10	<10	<10/<10	<10/<10	Not Enough Samples

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	S	S	NS	NS						NS	NS	S
Aesthetics												S
Agriculture					NS		NS	NS				
Primary Body Contact Recreation									NEI			
Public & Private Water Supply				NS		S			S			
Fish Consumption				S								

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes

Fish & Wildlife Propagation not supporting for Selenium
Public & Private Water Supply not supporting for Selenium

Elm Fork of the Red River at Granite

Sample Record	Times Visited	Station ID
June 2004 - Current	148	311800000010-002AT

Stream Data

County	Bryan	Request Data By Email
Location	South of the city of Granite on State Highway 6	
Latitude/Longitude	34.92637482, -99.50197667	
Planning Watershed	Southwest (8-digit HUC - 11120304)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	138	18.3	18.9	-0.1/35.3	10.2/25.8	
In-Situ	Turbidity (NTU)	142	83	12	2/>1000	5/26	
In-Situ	pH (units)	138	7.92	7.91	7.20/8.91	7.78/8.02	
In-Situ	Dissolved Oxygen (mg/L)	138	9.32	9.55	2.24/15.84	7.70/10.86	
In-Situ	Hardness (mg/L)	141	2296	2270	240/7140	1875/2687	
Minerals	Total Dissolved Solids (mg/L)	145	14227	12600	890/40500	8390/17600	
Minerals	Specific Conductivity (uS/cm)	138	22401	20099	1413/60705	13512/28418	
Minerals	Chloride (mg/L)	147	7293	6350	192/25700	3340/9810	
Minerals	Sulfate (mg/L)	147	1404	1450	126/2520	1220/1600	
Nutrients	Total Phosphorus (mg/L)	101	0.073	0.025	<0.005/1.700	0.015/0.046	
Nutrients	Total Nitrogen (mg/L)	105	1.18	1.02	<0.05/5.42	0.77/1.29	
Nutrients	Nitrate/Nitrite (mg/L)	104	0.29	0.07	<0.05/2.60	<0.05/0.36	
Nutrients	Chlorophyll A (mg/m^3)	76	11.4	7.4	0.5/73.9	3.0/12.2	TSI=54.5
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	18	1072	387	<10/2420	69/2420	Mean>OWQS
Bacteria	E. Coli (cfu/100ml)(*-Geo. Mn.)	18	2710	2101	278/15531	922/2491	Mean>OWQS

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	S	S	S	NS						NS	NS	S
Aesthetics												S
Agriculture					S		NS	S				
Primary Body Contact Recreation									NS			
Public & Private Water Supply				NS		S			S			
Fish Consumption				NS								

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes

Fish Consumption not supporting for Lead
Fish & Wildlife Propagation not supporting for Selenium
Public & Private Water Supply not supporting for Selenium

Flint Creek at Flint

Sample Record	Times Visited	Station ID
November 1998 - Current	192	121700060010-001AT

Stream Data

County	Delaware	Request Data By Email
Location	North of the Town of Flint on county road	
Latitude/Longitude	36.1867733, -94.70680493	
Planning Watershed	Lower Arkansas (8-digit HUC - 11110103)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	147	17.1	17.0	2.5/28.7	11.0/23.0	
	Turbidity (NTU)	147	2	1	0/58	1/2	
	pH (units)	146	7.68	7.68	6.44/8.79	7.44/7.89	
	Dissolved Oxygen (mg/L)	147	9.46	9.21	4.97/14.94	8.01/10.73	
	Hardness (mg/L)	150	116	115	<10/218	106/125	
Minerals	Total Dissolved Solids (mg/L)	33	184	174	112/552	158/188	
	Specific Conductivity (uS/cm)	145	296	298	152/452	262/335	
	Chloride (mg/L)	112	15	14	<10/43	<10/19	
	Sulfate (mg/L)	112	17	16	<10/69	12/20	
Nutrients	Total Phosphorus (mg/L)	160	0.178	0.150	0.055/1.450	0.092/0.189	See Notes
	Total Nitrogen (mg/L)	155	2.87	2.77	<0.05/7.95	2.13/3.53	
	Nitrate/Nitrite (mg/L)	156	2.70	2.51	0.80/7.55	2.03/3.32	
	Chlorophyll A (mg/m^3)	95	1.0	0.8	<0.1/4.2	0.5/1.2	TSI=30.4
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	74	523	41	<10/18000	<10/109	Mean>OWQS
	E. Coli (cfu/100ml)(*-Geo. Mn.)	74	207	31	<10/4611	<10/74	Mean>OWQS

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment	Total Phosphorus
Fish & Wildlife Propagation	S	S	S	S						S	S	S	
Aesthetics												S	NS
Agriculture					S		S	S					
Primary Body Contact Recreation									NS				
Public & Private Water Supply				S					S				
Fish Consumption				S									

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes

100%(72 of 72) of rolling Geo. Mean exceed OWQS criterion of 0.037 ppm

Fourche-Maline Creek at Red Oak

Sample Record	Times Visited	Station ID
November 1998 - Current	179	220100040020-001AT

Stream Data

County	Latimer	Request Data By Email
Location	S.E. of the Town of Red Oak off US Highway 270	
Latitude/Longitude	34.91232472, -95.15608416	
Planning Watershed	Lower Arkansas (8-digit HUC - 11110105)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	160	17.6	18.9	1.0/31.6	10.5/23.8	
	Turbidity (NTU)	165	37	27	5/390	17/42	
	pH (units)	162	7.15	7.03	5.77/8.76	6.84/7.47	
	Dissolved Oxygen (mg/L)	161	6.05	6.01	0.84/15.69	3.18/8.48	
	Hardness (mg/L)	162	53	48	<10/212	34/65	
Minerals	Total Dissolved Solids (mg/L)	48	107	104	50/175	84/127	
	Specific Conductivity (uS/cm)	159	167	146	11/1106	101/210	
	Chloride (mg/L)	113	<10	<10	<10/22	10</11	
	Sulfate (mg/L)	114	22	21	<10/49	17/26	
Nutrients	Total Phosphorus (mg/L)	166	0.081	0.068	<0.005/0.867	0.047/0.091	
	Total Nitrogen (mg/L)	164	0.79	0.76	0.16/1.70	0.56/0.97	
	Nitrate/Nitrite (mg/L)	166	0.15	0.12	<0.05/0.97	<0.05/0.22	
	Chlorophyll A (mg/m^3)	47	8.3	3.3	0.8/34.0	2.3/13.4	TSI=51.4
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	42	417	76	<10/8000	51/214	Mean>OWQS
	E. Coli (cfu/100ml)(*-Geo. Mn.)	42	231	69	<10/1986	30/219	

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	S	S	NS	NS						S	NS	S
Aesthetics												S
Agriculture					S		S	S				
Primary Body Contact Recreation									NS			
Public & Private Water Supply				NEI		NEI			NEI			
Fish Consumption				S								

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes

Fish & Wildlife Propagation not supporting for Lead

Glover River at Glover

Sample Record	Times Visited	Station ID
November 1998 - Current	195	410210080010-001AT

Stream Data

County	McCurtain	Request Data By Email
Location	West of the Town of Broken Bow on State Highway 3	
Latitude/Longitude	34.09774144, -94.90248786	
Planning Watershed	Southeast (8-digit HUC - 11140107)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	167	19.9	20.0	1.8/35.1	12.3/27.1	
	Turbidity (NTU)	171	11	6	1/89	4/11	
	pH (units)	168	7.31	7.25	5.07/9.26	7.03/7.51	
	Dissolved Oxygen (mg/L)	168	8.57	8.60	2.52/14.41	7.13/9.99	
	Hardness (mg/L)	169	25	16	<10/231	12/26	
Minerals	Total Dissolved Solids (mg/L)	36	47	43	25/95	35/60	
	Specific Conductivity (uS/cm)	167	57	50	<10/437	37/71	
	Chloride (mg/L)	99	7	5	<10/18	<10/10	
	Sulfate (mg/L)	99	9	10	<10/34	<10/10	
Nutrients	Total Phosphorus (mg/L)	166	0.027	0.018	<0.005/0.500	0.013/0.025	
	Total Nitrogen (mg/L)	164	0.46	0.38	<0.05/1.92	0.27/0.55	
	Nitrate/Nitrite (mg/L)	164	0.14	0.05	<0.05/1.42	<0.05/0.16	
	Chlorophyll A (mg/m^3)	99	2.4	2.1	0.1/8.7	0.9/3.2	TSI=39.0
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	55	53	20	<10/400	<10/63	
	E. Coli (cfu/100ml)(*-Geo. Mn.)	55	37	18	<10/354	<10/30	

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	S	S	S	NS						S	S	S
Aesthetics												S
Agriculture					S		S	S				
Primary Body Contact Recreation									S			
Public & Private Water Supply				S		S			S			
Fish Consumption				S								

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes: *Fish & Wildlife Propagation not supporting for Lead*

Honey Creek at Grove

Sample Record	Times Visited	Station ID
December 1998-June 2006	108	121600030290-001AT

Stream Data

County	Delaware	Request Data By Email
Location	Southeast of the City of Grove on County Road N4670	
Latitude/Longitude	36.54773713, -94.12072263	
Planning Watershed	Grand (8-digit HUC - 11070206)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	89	16.6	11.3	-0.1/35.3	18.9/25.8	
In-Situ	Turbidity (NTU)	89	3	1	2/<1000	12/26	
In-Situ	pH (units)	89	7.70	7.50	7.20/8.91	7.91/8.02	
In-Situ	Dissolved Oxygen (mg/L)	88	8.72	7.37	2.24/15.84	9.55/10.86	
In-Situ	Hardness (mg/L)	89	150	128	240/7140	2270/2687	
Minerals	Total Dissolved Solids (mg/L)	18	228	178	890/40500	12600/17600	
Minerals	Specific Conductivity (uS/cm)	89	495	369	1413/60705	20099/28418	
Minerals	Chloride (mg/L)	86	57	26	192/25700	6350/9810	
Minerals	Sulfate (mg/L)	86	35	17	126/2520	1450/1600	
Nutrients	Total Phosphorus (mg/L)	93	0.088	0.050	<0.005/1.700	0.025/0.046	
Nutrients	Total Nitrogen (mg/L)	87	2.87	2.05	<0.10/5.42	1.02/1.29	
Nutrients	Nitrate/Nitrite (mg/L)	88	2.55	1.69	<0.05/2.60	0.07/0.36	
Nutrients	Chlorophyll A (mg/m^3)	28	2.3	0.4	0.5/73.9	7.4/12.2	TSI=38.9
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	28	2107	90	<10/2420	387/2420	Mean>OWQS
Bacteria	E. Coli (cfu/100ml)(*-Geo. Mn.)	28	211	47	278/15531	2101/2491	Mean>OWQS

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	S	S	S	S						S	S	S
Aesthetics												S
Agriculture					S		S	S				
Primary Body Contact Recreation									NS			
Public & Private Water Supply				NEI		NEI			NEI			
Fish Consumption				S								

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes

Illinois River at Tahlequah

Sample Record	Times Visited	Station ID
November 1998 - Current	195	121700030010-001AT

Stream Data

County	Cherokee	Request Data By Email
Location	East of the Town of Tahlequah on US Highway 62	
Latitude/Longitude	35.92606447, -94.92380373	
Planning Watershed	Lower Arkansas (8-digit HUC - 11110103)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	148	17.6	17.5	0.8/31.7	10.9/24.0	
	Turbidity (NTU)	147	7	4	0/84	3/6	
	pH (units)	146	7.88	7.84	6.47/9.29	7.57/8.13	
	Dissolved Oxygen (mg/L)	148	10.01	10.03	4.66/15.88	7.76/12.06	
	Hardness (mg/L)	148	115	114	69/161	106/124	
Minerals	Total Dissolved Solids (mg/L)	33	173	160	104/565	137/178	
	Specific Conductivity (uS/cm)	148	272	274	66/713	241/294	
	Chloride (mg/L)	112	11	<10	<10/24	8/14	
	Sulfate (mg/L)	112	14	13	<10/48	11/16	
Nutrients	Total Phosphorus (mg/L)	157	0.077	0.065	<0.005/0.438	0.039/0.103	See Notes
	Total Nitrogen (mg/L)	157	1.75	1.68	<0.10/3.76	1.17/2.27	
	Nitrate/Nitrite (mg/L)	157	1.52	1.50	0.23/3.61	0.97/1.96	
	Chlorophyll A (mg/m^3)	95	3.6	2.0	<0.1/46.4	1.5/3.1	TSI=43.1
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	73	142	20	<10/2500	<10/100	
	E. Coli (cfu/100ml)(*-Geo. Mn.)	73	61	<10	<10/884	<10/36	

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dssolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment	Total Posphorus
Fish & Wildlife Propagation	S	S	S	S						S	S	S	
Aesthetics												S	NS
Agriculture					S		S	S					
Primary Body Contact Recreation									S				
Public & Private Water Supply				S		S			S				
Fish Consumption				S									

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes: *92.5%(74 of 80) of 3-month rolling Geo. Mean above OWQS criterion of 0.037 ppm*

Illinois River at Watts

Sample Record	Times Visited	Station ID
November 1998 - Current	200	121700030350-001AT

Stream Data

County	Adair	Request Data By Email
Location	North of the Town of Watts on US Highway 59	
Latitude/Longitude	36.12994064, -94.57151225	
Planning Watershed	Lower Arkansas (8-digit HUC - 11110103)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	150	17.2	17.5	2.0/31.5	10.4/24.0	
	Turbidity (NTU)	148	11	6	1/95	4/12	
	pH (units)	149	7.90	7.92	6.51/9.03	7.73/8.12	
	Dissolved Oxygen (mg/L)	150	10.58	10.29	4.51/18.88	8.65/11.96	
	Hardness (mg/L)	151	127	127	10/215	115/138	
Minerals	Total Dissolved Solids (mg/L)	33	194	180	116/566	163/212	
	Specific Conductivity (uS/cm)	150	310	315	149/713	275/341	
	Chloride (mg/L)	111	14	13	<10/28	<10/18	
	Sulfate (mg/L)	111	17	15	<10/97	12/19	
Nutrients	Total Phosphorus (mg/L)	156	0.138	0.092	<0.005/1.153	0.048/0.164	See Notes
	Total Nitrogen (mg/L)	156	2.49	2.45	<0.10/5.06	2.04/2.88	
	Nitrate/Nitrite (mg/L)	156	2.18	2.18	0.65/4.64	1.70/2.51	
	Chlorophyll A (mg/m^3)	95	3.1	2.2	<0.1/15.3	1.6/3.4	TSI=41.7
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	74	526	20	<10/15531	<10/99	Mean>OWQS
	E. Coli (cfu/100ml)(*-Geo. Mn.)	74	358	19	<10/12997	<10/63	Mean>OWQS

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment	Total Posphorus
Fish & Wildlife Propagation	S	S	S	S						S	S	S	
Aesthetics												S	NS
Agriculture					S		S	S					
Primary Body Contact Recreation									NS				
Public & Private Water Supply				S		S			S				
Fish Consumption				S									

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes

91.6%(76of 83) of rolling Geo. Mean exceed OWQS criterion of 0.037 ppm

Island Bayou at Albany

Sample Record	Times Visited	Station ID
November 1998 - Current	39	410700000040-001AT

Stream Data

County	Bryan	Request Data by Email
Location	South of the Town of Albany off State Highway 70E	
Latitude/Longitude	33.853576, -96.16512	
Planning Watershed	Blue-Boggy (8-digit HUC - 11140101)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	37	16.8	17.2	2.9/28.1	10.4/23.2	
	Turbidity (NTU)	37	86	15	6/798	10/51	
	pH (units)	37	7.70	7.76	7.12/8.20	7.51/7.86	
	Dissolved Oxygen (mg/L)	37	8.72	7.85	5.11/15.22	6.35/10.97	
	Hardness (mg/L)	37	196	205	59/350	151/251	
Minerals	Total Dissolved Solids (mg/L)	39	372	385	130/674	275/469	
	Specific Conductivity (uS/cm)	37	654	707	124/1094	527/897	
	Chloride (mg/L)	39	66	66	<10/134	24/106	
	Sulfate (mg/L)	39	80	75	44/126	68/93	
Nutrients	Total Phosphorus (mg/L)	39	0.384	0.286	0.006/1.200	0.179/0.630	
	Total Nitrogen (mg/L)	39	1.51	1.04	0.54/3.97	0.94/1.82	
	Nitrate/Nitrite (mg/L)	39	0.36	0.19	<0.05/1.69	<0.05/0.48	
	Chlorophyll A (mg/m^3)	39	3.5	3.1	<0.1/12.5	1.6/4.9	TSI=42.8
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	17	649	488	56/2420	132/818	
	E. Coli (cfu/100ml)(*-Geo. Mn.)	17	711	308	15/2420	219/740	

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	S	S	S	S						S	S	S
Aesthetics												NEI
Agriculture					S		S	S				
Primary Body Contact Recreation									NEI			
Public & Private Water Supply				NEI		NEI			NEI			
Fish Consumption				S								

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes

Kiamichi River at Antlers

Sample Record	Times Visited	Station ID
November 1998 - Current	187	410300030010-001AT

Stream Data

County	Pushmataha	Request Data by Email
Location	North of the Town of Antlers on US Highway 271	
Latitude/Longitude	34.24876734, -95.60509256	
Planning Watershed	Southeast (8-digit HUC - 11140105)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	167	18.7	18.0	4.4/34.0	11.6/25.2	
	Turbidity (NTU)	170	27	18	2/173	13/29	
	pH (units)	166	7.38	7.39	5.04/9.31	7.01/7.80	
	Dissolved Oxygen (mg/L)	166	8.46	7.92	2.47/20.26	7.13/9.75	
	Hardness (mg/L)	169	26	19	<10/324	14/27	
Minerals	Total Dissolved Solids (mg/L)	48	53	53	30/100	44/59	
	Specific Conductivity (uS/cm)	167	55	53	<10/390	39/71	
	Chloride (mg/L)	118	<10	<10	<10/<10	<10/<10	
	Sulfate (mg/L)	118	13	11	<10/33	<10/14	
Nutrients	Total Phosphorus (mg/L)	174	0.044	0.034	<0.005/0.328	0.023/0.049	
	Total Nitrogen (mg/L)	171	0.58	0.54	<0.1/1.85	0.39/0.71	
	Nitrate/Nitrite (mg/L)	172	0.11	<0.05	<0.05/1.49	<0.05/0.14	
	Chlorophyll A (mg/m^3)	96	10.8	3.6	0.5/520.0	2.2/6.6	TSI=53.9
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	44	331	56	<10/6000	<10/228	Mean>OWQS
	E. Coli (cfu/100ml)(*-Geo. Mn.)	44	244	28	<10/4106	<10/99	

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	S	S	S	NS						S	NEI	S
Aesthetics												S
Agriculture					S		S	S				
Primary Body Contact Recreation									NS			
Public & Private Water Supply				S		S			S			
Fish Consumption				NS								

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes

Fish Consumption not supporting for Lead
Fish & Wildlife Propagation not supporting for Silver and Lead

Kiamichi River at Big Cedar

Sample Record	Times Visited	Station ID
November 1998 - Current	182	410310020010-001AT

Stream Data

County	LeFlore	Request Data by Email
Location	East of the Town of Big Cedar on State Highway 63	
Latitude/Longitude	34.63884253, -94.61226313	
Planning Watershed	Southeast (8-digit HUC - 11140105)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	162	17.2	17.7	4.2/33.5	10.8/22.4	
	Turbidity (NTU)	166	7	6	1/64	5/8	
	pH (units)	164	7.04	6.88	5.71/9.02	6.64/7.40	22% of values<OWQS
	Dissolved Oxygen (mg/L)	164	8.46	8.52	3.02/15.05	6.89/10.05	
	Hardness (mg/L)	164	15	<10	<10/134	<10/13	
Minerals	Total Dissolved Solids (mg/L)	33	39	26	11/109	23/51	
	Specific Conductivity (uS/cm)	160	22	22	<10/163	14/28	
	Chloride (mg/L)	95	<10	<10	<10/10	<10/<10	
	Sulfate (mg/L)	95	<10	<10	<10/23	<10/<10	
Nutrients	Total Phosphorus (mg/L)	166	0.014	0.011	<0.005/0.076	<0.005/0.018	
	Total Nitrogen (mg/L)	159	0.27	0.22	<0.05/1.13	0.15/0.34	
	Nitrate/Nitrite (mg/L)	160	0.06	<0.05	<0.05/0.70	<0.05/<0.05	
	Chlorophyll A (mg/m^3)	62	0.9	0.4	<0.1/7.0	0.2/0.9	TSI=29.9
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	48	663	25	<10/24000	<10/68	
	E. Coli (cfu/100ml)(*-Geo. Mn.)	48	86	12	<10/1317	<10/45	

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	S	NS	S	NS						S	S	S
Aesthetics												S
Agriculture					S		S	S				
Primary Body Contact Recreation									S			
Public & Private Water Supply				S		S			S			
Fish Consumption				S								

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes: *Fish & Wildlife Propagation not supporting for Lead, Copper, Silver, and Zinc*

Sampling and Assessment by the **Oklahoma Water Resources Board** – 3800 Classen Blvd, Oklahoma City, OK, 73118 – 405.530.8800 – http://www.owrb.ok.gov

Kiamichi River at Fort Towson

Sample Record	Times Visited	Station ID
February 2002 - 2012	105	410300010010-002AT

Stream Data

County	Bryan	Request Data by Email
Location	South of the Town of Fort Towson on State Highway 109	
Latitude/Longitude	33.96940193, -95.27829905	
Planning Watershed	Southeast (8-digit HUC - 11140150)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	85	18.9	11.8	-0.1/36.2	18.8/25.9	
	Turbidity (NTU)	86	43	24	1/65	6/12	
	pH (units)	85	7.59	7.21	7.26/8.58	8.07/8.24	
	Dissolved Oxygen (mg/L)	85	8.83	6.79	1.46/16.50	9.99/11.74	
	Hardness (mg/L)	85	41	24	238/1260	469/589	
Minerals	Total Dissolved Solids (mg/L)	16	68	58	401/1920	800/1110	
	Specific Conductivity (uS/cm)	85	76	51	650/3419	1443/1740	
	Chloride (mg/L)	70	11	<10	69/786	204/232	
	Sulfate (mg/L)	70	18	13	47/1170	248/322	
Nutrients	Total Phosphorus (mg/L)	86	0.069	0.043	<0.005/0.169	0.024/0.053	
	Total Nitrogen (mg/L)	85	0.64	0.47	0.20/1.60	0.71/0.90	
	Nitrate/Nitrite (mg/L)	85	0.11	<0.05	<0.05/1.17	<0.05/0.32	
	Chlorophyll A (mg/m^3)	33	9.7	3.1	0.3/28.4	3.4/5.3	TSI=52.9
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	24	419	<10	20/3000	243/582	
	E. Coli (cfu/100ml)(*-Geo. Mn.)	24	60	<10	<10/437	80/180	

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	S	S	S	NS						S	S	S
Aesthetics												S
Agriculture					S		S	S				
Primary Body Contact Recreation									S			
Public & Private Water Supply				NS		S			S			
Fish Consumption				NS								

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes

Fish Consumption not supporting for Lead
Fish & Wildlife Propagation not supporting for Lead
Public & Private Water Supply not supporting for Lead

Sampling and Assessment by the **Oklahoma Water Resources Board** – 3800 Classen Blvd, Oklahoma City, OK, 73118 – 405.530.8800 – http://www.owrb.ok.gov

Kiamichi River at Tuskahoma

Sample Record	Times Visited	Station ID
December 1998 - Current	136	410310010010-001AT

Stream Data

County	Pushmataha	Request Data by Email
Location	South of the Town of Tuskahoma off US Highway 271	
Latitude/Longitude	34.61236033, -95.27727429	
Planning Watershed	Southeast (8-digit HUC - 11140105)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	115	19.3	12.6	2.6/35.2	21.5/27.0	
	Turbidity (NTU)	118	21	10	4/>1000	44/102	
	pH (units)	116	7.24	6.91	6.51/8.78	8.03/8.22	
	Dissolved Oxygen (mg/L)	116	8.43	6.99	3.71/15.30	8.50/10.29	
	Hardness (mg/L)	116	20	11	78/790	209/331	
Minerals	Total Dissolved Solids (mg/L)	19	43	38	144/2260	422/758	
	Specific Conductivity (uS/cm)	115	41	19	137/4559	859/1372	
	Chloride (mg/L)	83	7	<10	<10/1010	134/277	
	Sulfate (mg/L)	82	11	<10	18/300	65/115	
Nutrients	Total Phosphorus (mg/L)	126	0.041	0.023	0.031/1.204	0.140/0.270	
	Total Nitrogen (mg/L)	115	0.47	0.28	0.22/6.33	0.81/1.43	
	Nitrate/Nitrite (mg/L)	116	0.10	<0.05	<0.05/2.91	<0.05/0.45	
	Chlorophyll A (mg/m^3)	30	6.5	1.2	1.1/55.1	14.0/25.3	TSI=48.9
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	26	1539	<10	<10/10000	350/821	
	E. Coli (cfu/100ml)(*-Geo. Mn.)	26	319	18	<10/2420	145/488	

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	S	S	S	NS						S	NEI	S
Aesthetics												S
Agriculture					S		S	S				
Primary Body Contact Recreation									S			
Public & Private Water Supply				S		S			S			
Fish Consumption				S								

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes: *Fish & Wildlife Propagation not supporting for Lead and Silver*

Lee Creek at Short

Sample Record	Times Visited	Station ID
January 2003 - Present	197	220200050010-001AT

Stream Data

County	Sequoyah	Request Data by Email
Location	West of the Town of Short on State Highway 101	
Latitude/Longitude	35.56589868, -94.53152717	
Planning Watershed	Lower Arkansas (8-digit HUC - 11110104)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	181	17.6	16.5	0.2/32.5	9.9/25.0	
	Turbidity (NTU)	180	8	5	1/124	4/8	
	pH (units)	181	7.62	7.60	6.31/8.70	7.38/7.84	
	Dissolved Oxygen (mg/L)	181	9.37	9.06	5.23/13.94	7.68/11.16	
	Hardness (mg/L)	178	47	44	<10/130	36/55	
Minerals	Total Dissolved Solids (mg/L)	25	58	55	40/96	48/67	
	Specific Conductivity (uS/cm)	180	100	98	<10/266	78/113	
	Chloride (mg/L)	92	<10	<10	<10/11	<10/<10	
	Sulfate (mg/L)	92	<10	<10	<10/49	<10/<10	
Nutrients	Total Phosphorus (mg/L)	180	0.013	0.010	<0.005/0.149	<0.005/0.015	
	Total Nitrogen (mg/L)	181	0.29	0.23	0.1/1.72	0.15/0.33	
	Nitrate/Nitrite (mg/L)	180	0.13	<0.05	<0.05/1.62	<0.05/0.14	
	Chlorophyll A (mg/m^3)	149	2.1	0.9	<0.1/92.0	0.4/1.7	TSI=38.1
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	61	413	<10	<10/7100	<10/41	
	E. Coli (cfu/100ml)(*-Geo. Mn.)	61	127	<10	<10/2359	<10/33	

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment	Total Phosphorus
Fish & Wildlife Propagation	S	S	S	NS						S	S	S	
Aesthetics												NEI	NEI
Agriculture					S		S	S					
Primary Body Contact Recreation									S				
Public & Private Water Supply				S									
Fish Consumption				S									

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes: *Fish & Wildlife Propagation not supporting for Lead*

Little River at Cloudy

Sample Record	Times Visited	Station ID
November 1998 - Current	161	410210020140-001AT

Stream Data

County	Pushmataha	Request Data by Email
Location	East of the Town of Cloudy on Cloudy Road	
Latitude/Longitude	34.32564049, -95.19911409	
Planning Watershed	southeast (8-digit HUC - 11140107)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	139	19.6	20.0	2.0/36.3	12.0/26.9	
In-Situ	Turbidity (NTU)	138	12	8	1/91	5/15	25% of values>OWQS
In-Situ	pH (units)	138	7.18	7.13	5.16/8.63	6.87/7.44	
In-Situ	Dissolved Oxygen (mg/L)	138	8.95	8.87	2.81/14.13	7.64/10.35	
In-Situ	Hardness (mg/L)	140	16	<10	<10/200	<10/13	
Minerals	Total Dissolved Solids (mg/L)	53	43	43	20/94	32/50	
Minerals	Specific Conductivity (uS/cm)	139	32	35	<10/130	18/42	
Minerals	Chloride (mg/L)	112	<10	<10	<10/17	<10/<10	
Minerals	Sulfate (mg/L)	112	<10	<10	<10/46	<10/11	
Nutrients	Total Phosphorus (mg/L)	141	0.029	0.019	<0.005/1.043	0.013/0.025	
Nutrients	Total Nitrogen (mg/L)	135	0.39	0.35	<0.10/1.45	0.24/0.50	
Nutrients	Nitrate/Nitrite (mg/L)	135	0.10	<0.05	<0.05/0.84	<0.05/0.11	
Nutrients	Chlorophyll A (mg/m^3)	61	2.4	1.1	<0.1/45.4	0.7/1.6	TSI=39.3
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	40	235	56	<10/2800	<10/158	
Bacteria	E. Coli (cfu/100ml)(*-Geo. Mn.)	40	107	17	<10/1012	<10/103	

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	NS	S	S	NS						S	S	S
Aesthetics												S
Agriculture					S		S	S				
Primary Body Contact Recreation									S			
Public & Private Water Supply				S		S			S			
Fish Consumption				NS								

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes

Fish Consumption not supporting for Lead
Fish & Wildlife Propagation not supporting for Copper, Lead, Zinc, and Silver

Little River at Holly Creek

Sample Record	Times Visited	Station ID
November 2003 - Current	128	410200010200-002AT

Stream Data

County	McCurtain	Request Data by Email
Location	North of the Town of Idabel on County Road 4615	
Latitude/Longitude	33.93595796, -94.82864529	
Planning Watershed	Southeast (8-digit HUC - 11140107)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	113	19.0	20.2	4.2/32.3	11.8/25.8	
	Turbidity (NTU)	118	17	15	0/65	10/20	38% of values>OWQS
	pH (units)	115	7.22	7.14	6.15/8.62	6.85/7.53	
	Dissolved Oxygen (mg/L)	114	9.14	7.68	3.72/78.80	5.97/9.97	
	Hardness (mg/L)	115	34	25	<10/251	17/41	
Minerals	Total Dissolved Solids (mg/L)	30	63	54	30/126	44/86	
	Specific Conductivity (uS/cm)	113	90	79	<10/257	51/123	
	Chloride (mg/L)	66	12	<10	<10/31	<10/11	
	Sulfate (mg/L)	65	12	11	<10/22	<10/13	
Nutrients	Total Phosphorus (mg/L)	117	0.038	0.033	<0.005/0.140	0.026/0.048	
	Total Nitrogen (mg/L)	116	0.59	0.53	<0.10/1.40	0.42/0.73	
	Nitrate/Nitrite (mg/L)	116	0.14	0.09	<0.05/0.82	<0.05/0.18	
	Chlorophyll A (mg/m^3)	78	7.3	5.7	0.3/48.2	2.6/9.4	TSI=50.1
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	46	86	15	<10/2200	<10/31	
	E. Coli (cfu/100ml)(*-Geo. Mn.)	46	68	22	<10/1296	<10/46	

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	NS	S	U	NS						S	S	S
Aesthetics												S
Agriculture					S		S	S				
Primary Body Contact Recreation									S			
Public & Private Water Supply				S		S			S			
Fish Consumption				S								

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes

Fish & Wildlife Propagation not supporting for Lead and Silver
U = Assessment yielded undetermined supporting status

Little Lee Creek at Nicut

Sample Record	Times Visited	Station ID
February 2008 - Current	137	220200050040-001AT

Stream Data

County	Sequoyah	Request Data by Email
Location	West of the Town of Short on State Highway 101	
Latitude/Longitude	35.58, -94.56	
Planning Watershed	Lower Arkansas (8-digit HUC - 11110104)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	135	17.3	17.7	0.3/31.4	9.8/24.7	
	Turbidity (NTU)	137	8	3	0/223	2/5	
	pH (units)	137	7.61	7.57	6.30/8.56	7.41/7.87	
	Dissolved Oxygen (mg/L)	137	9.76	9.56	5.01/14.47	8.15/11.81	
	Hardness (mg/L)	133	64	62	36/140	53/72	
Minerals	Total Dissolved Solids (mg/L)	35	78	76	50/125	65/86	
	Specific Conductivity (uS/cm)	134	144	138	75/314	119/154	
	Chloride (mg/L)	57	<10	<10	<10/<10	<10/<10	
	Sulfate (mg/L)	57	<10	<10	<10/15	<10/<10	
Nutrients	Total Phosphorus (mg/L)	134	0.013	<0.005	<0.005/0.259	<0.005/0.009	
	Total Nitrogen (mg/L)	134	0.24	0.18	<0.10/1.41	0.15/0.24	
	Nitrate/Nitrite (mg/L)	133	0.10	<0.05	<0.05/0.96	<0.05/0.09	
	Chlorophyll A (mg/m^3)	112	0.9	0.6	<0.1/6.4	0.4/0.9	TSI=29.0
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	23	241	<10	<10/2420	<10/16	
	E. Coli (cfu/100ml)(*-Geo. Mn.)	23	359	<10	<10/6488	<10/13	

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment	Phosphorus
Fish & Wildlife Propagation	S	S	S	S						S	S	S	
Aesthetics												NEI	NEI
Agriculture					S		S	S					
Primary Body Contact Recreation									NEI				
Public & Private Water Supply				S		S			S				
Fish Consumption				S									

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes

Little River at Sasakwa

Sample Record	Times Visited	Station ID
November 1998 - Current	175	520800010010-001AT

Stream Data

County	Seminole	Request Data by Email
Location	North of the Town of Sasakwa on State Highway 56	
Latitude/Longitude	34.96534987, -96.5120113	
Planning Watershed	Central (8-digit HUC - 11090204)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	166	17.9	19.0	0.3/32.3	10.9/26.0	
In-Situ	Turbidity (NTU)	163	148	44	2/>1000	17/142	19% of values>OWQS
In-Situ	pH (units)	165	8.07	8.10	6.84/8.67	7.94/8.26	
In-Situ	Dissolved Oxygen (mg/L)	166	9.09	8.61	3.88/17.75	7.54/10.30	
In-Situ	Hardness (mg/L)	166	314	304	72/980	226/388	
Minerals	Total Dissolved Solids (mg/L)	101	655	686	130/2290	438/802	
Minerals	Specific Conductivity (uS/cm)	166	1186	1207	204/4335	711/1571	
Minerals	Chloride (mg/L)	165	245	234	29/1360	138/311	
Minerals	Sulfate (mg/L)	164	44	39	<10/261	30/48	
Nutrients	Total Phosphorus (mg/L)	167	0.119	0.052	<0.005/2.050	0.027/0.106	
Nutrients	Total Nitrogen (mg/L)	166	0.82	0.61	<0.05/6.06	0.42/0.94	
Nutrients	Nitrate/Nitrite (mg/L)	167	0.11	<0.05	<0.05/1.07	<0.05/0.11	
Nutrients	Chlorophyll A (mg/m^3)	64	5.8	3.5	<0.1/90.3	1.5/6.8	TSI=47.8
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	48	2614	106	<10/93000	33/571	Mean>OWQS
Bacteria	E. Coli (cfu/100ml)(*-Geo. Mn.)	48	389	54	<10/5794	12/139	

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	NS	S	S	S						S	S	S
Aesthetics												S
Agriculture					S		S	S				
Primary Body Contact Recreation									NS			
Public & Private Water Supply				NEI		NEI			NEI			
Fish Consumption				S								

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes

Little River at Tecumseh

Sample Record	Times Visited	Station ID
January 2013- Current	49	520800020010-001AT

Stream Data

County	Potawatomie	Request Data by Email
Location	South of the Town of Tecumseh on US 177	
Latitude/Longitude	35.1725, -96.931667	
Planning Watershed	Central (8-digit HUC - 11090203)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	47	16.0	15.8	0.5/37.3	8.3/23.9	
	Turbidity (NTU)	47	30	10	3/254	5/21	
	pH (units)	47	8.15	8.23	7.54/8.53	8.00/8.30	
	Dissolved Oxygen (mg/L)	47	10.02	9.30	7.46/15.28	8.40/11.39	
	Hardness (mg/L)	47	277	278	141/404	240/310	
Minerals	Total Dissolved Solids (mg/L)	48	496	522	180/661	420/570	
	Specific Conductivity (uS/cm)	47	953	987	326/1413	906/1110	
	Chloride (mg/L)	50	138	146	16/240	96/170	
	Sulfate (mg/L)	50	51	51	26/72	43/58	
Nutrients	Total Phosphorus (mg/L)	50	0.042	0.020	<0.005/0.246	0.011/0.072	
	Total Nitrogen (mg/L)	50	0.63	0.49	0.26/1.64	0.43/0.69	
	Nitrate/Nitrite (mg/L)	50	0.07	<0.05	<0.05/0.30	<0.05/<0.05	
	Chlorophyll A (mg/m^3)	50	2.9	2.0	0.3/10.3	0.9/3.7	TSI=41.1
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	15	1212	1046	179/2420	291/2420	
	E. Coli (cfu/100ml)(*-Geo. Mn.)	15	524	110	20/2420	31/770	

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	NEI	NEI	NEI	NEI						NEI	NEI	NEI
Aesthetics												NEI
Agriculture					NEI		NEI	NEI				
Primary Body Contact Recreation									NEI			
Public & Private Water Supply				NEI		NEI			NEI			
Fish Consumption				NEI								

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes

Mountain Fork River at Eagletown

Sample Record	Times Visited	Station ID
November 1998 - Current	181	410210040010-001AT

Stream Data

County	McCurtain	Request Data by Email
Location	East of the Town of Broken Bow on US Highway 70	
Latitude/Longitude	34.04168908, -94.62071144	
Planning Watershed	Southeast (8-digit HUC - 11140108)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	161	16.8	17.1	2.6/29.5	12.2/21.4	
	Turbidity (NTU)	167	4	3	1/29	2/5	
	pH (units)	161	7.26	7.19	4.68/9.30	6.88/7.59	
	Dissolved Oxygen (mg/L)	162	9.26	9.14	4.99/12.85	8.12/10.39	
	Hardness (mg/L)	163	14	<10	<10/93	<10/14	
Minerals	Total Dissolved Solids (mg/L)	51	31	30	5/84	23/35	
	Specific Conductivity (uS/cm)	160	29	33	<10/181	13/36	
	Chloride (mg/L)	118	<10	<10	<10/27	<10/<10	
	Sulfate (mg/L)	118	<10	<10	<10/15	<10/<10	
Nutrients	Total Phosphorus (mg/L)	168	0.018	0.011	<0.005/0.808	0.006/0.014	
	Total Nitrogen (mg/L)	168	0.43	0.38	<0.10/6.22	0.28/0.47	
	Nitrate/Nitrite (mg/L)	168	0.15	0.14	<0.05/0.50	0.09/0.18	
	Chlorophyll A (mg/m^3)	81	1.4	1.2	<0.1/2.9	1.0/1.8	TSI=33.7
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	53	259	18	<10/4000	<10/120	
	E. Coli (cfu/100ml)(*-Geo. Mn.)	53	70	20	<10/1956	<10/31	

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	S	S	S	NS						S	S	S
Aesthetics												S
Agriculture					S		S	S				
Primary Body Contact Recreation									S			
Public & Private Water Supply				S								
Fish Consumption				S								

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes: *Fish & Wildlife Propagation not supporting for Lead and Silver*

Mountain Fork River at Smithville

Sample Record	Times Visited	Station ID
November 1998 - Current	248	410210060010-001AT

Stream Data

County	McCurtain	Request Data by Email
Location	East of the Town of Smithville on State Highway 4	
Latitude/Longitude	34.4616061, -94.63230583	
Planning Watershed	Southeast (8-digit HUC - 11140108)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	222	18.4	19.2	0.5/33.5	10.8/26.2	
	Turbidity (NTU)	227	15	8	1/347	5/13	
	pH (units)	224	7.22	7.09	4.73/9.04	6.86/7.58	
	Dissolved Oxygen (mg/L)	223	8.99	8.67	3.66/19.00	7.44/10.45	
	Hardness (mg/L)	223	16	<10	<10/135	<10/15	
Minerals	Total Dissolved Solids (mg/L)	41	39	38	14/72	29/47	
	Specific Conductivity (uS/cm)	222	35	37	10/180	29/43	
	Chloride (mg/L)	106	<10	<10	<10/28	<10/<10	
	Sulfate (mg/L)	105	<10	<10	<10/30	<10/<10	
Nutrients	Total Phosphorus (mg/L)	224	0.028	0.020	0.005/0.281	0.011/0.029	
	Total Nitrogen (mg/L)	220	0.48	0.43	0.10/2.11	0.30/0.57	
	Nitrate/Nitrite (mg/L)	219	0.13	<0.05	<0.05/1.46	0.05/0.19	
	Chlorophyll A (mg/m^3)	150	2.6	1.9	<0.1/15.8	0.9/3.3	TSI=40.0
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	65	1112	<10	<10/57000	<10/93	
	E. Coli (cfu/100ml)(*-Geo. Mn.)	65	125	<10	<10/2420	<10/69	

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment	Total Phosphorus
Fish & Wildlife Propagation	S	S	S	NS						S	S	S	
Aesthetics												S	NEI
Agriculture					S		S	S					
Primary Body Contact Recreation									S				
Public & Private Water Supply				S		S			S				
Fish Consumption				S									

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes: *Fish & Wildlife Propagation not supporting for Copper, Lead, Silver, and Zinc*

Mud Creek at Courtney

Sample Record	Times Visited	Station ID
November 1998 - Current	170	311100040010-001AT

Stream Data

County	Love	Request Data By Email
Location	Near the Town of Courtney on State Highway 32	
Latitude/Longitude	34.004167, -97.566667	
Planning Watershed	Lower Washita (8-digit HUC - 11130201)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	165	19.0	19.5	3.4/32.6	12.8/26.3	
	Turbidity (NTU)	166	233	113	15/>1000	50/312	60% of values>OWQS
	pH (units)	164	7.86	7.89	7.14/8.81	7.63/8.07	
	Dissolved Oxygen (mg/L)	165	6.69	6.66	1.42/17.43	5.08/8.16	13% of values<OWQS and 13% of values<alt OWQS
	Hardness (mg/L)	164	236	215	30/670	131/294	
Minerals	Total Dissolved Solids (mg/L)	100	476	388	93/1380	284/570	
	Specific Conductivity (uS/cm)	164	736	632	90/2292	340/895	
	Chloride (mg/L)	164	96	62	<10/568	25/128	
	Sulfate (mg/L)	163	83	71	20/412	44/109	
Nutrients	Total Phosphorus (mg/L)	165	0.250	0.188	0.024/1.609	0.109/0.338	
	Total Nitrogen (mg/L)	164	1.45	1.28	0.30/4.27	0.83/1.85	
	Nitrate/Nitrite (mg/L)	165	0.20	0.12	<0.05/0.97	<0.05/0.33	
	Chlorophyll A (mg/m^3)	46	26.0	12.0	1.5/164.0	4.9/27.6	TSI=62.6
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	38	826	330	<10/17000	48/613	Mean>OWQS
	E. Coli (cfu/100ml)(*-Geo. Mn.)	38	209	65	<10/1986	28/299	

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	NS	S	NS	S						S	NEI	S
Aesthetics												S
Agriculture					S		S	S				
Primary Body Contact Recreation									NS			
Public & Private Water Supply				NEI		NEI			NEI			
Fish Consumption				S								

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes

Muddy Boggy Creek at Atoka

Sample Record	Times Visited	Station ID
November 1998 - Current	183	410400050270-001AT

Stream Data

County	Atoka	Request Data By Email
Location	North of the Town of Atoka on US 69	
Latitude/Longitude	34.39420542, -96.12436418	
Planning Watershed	Blue-Boggy (8-digit HUC -11140103)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	162	17.5	17.6	1.7/31.3	10.3/24.9	
	Turbidity (NTU)	162	141	75	5/>1000	38/152	
	pH (units)	162	7.34	7.38	5.92/8.31	7.12/7.58	
	Dissolved Oxygen (mg/L)	162	7.45	6.80	2.97/34.62	5.36/9.03	19% of values<OWQS and 6% of values<alt OWQS
	Hardness (mg/L)	161	87	85	24/197	64/107	
Minerals	Total Dissolved Solids (mg/L)	48	202	192	51/405	154/249	
	Specific Conductivity (uS/cm)	161	248	225	62/757	152/307	
	Chloride (mg/L)	113	23	15	<10/148	<10/27	
	Sulfate (mg/L)	113	54	48	16/134	35/64	
Nutrients	Total Phosphorus (mg/L)	167	0.135	0.101	<0.005/0.632	0.066/0.173	
	Total Nitrogen (mg/L)	166	1.14	1.00	0.36/4.21	0.77/1.33	
	Nitrate/Nitrite (mg/L)	166	0.15	0.09	<0.05/0.70	<0.05/0.20	
	Chlorophyll A (mg/m^3)	65	10.6	5.5	<0.1/42.5	2.7/17.6	TSI=53.7
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	50	872	100	<10/19863	42/905	Mean>OWQS
	E. Coli (cfu/100ml)(*-Geo. Mn.)	50	832	70	<10/19863	19/323	

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	S	S	NEI	NS						S	NEI	S
Aesthetics												S
Agriculture					S		S	S				
Primary Body Contact Recreation									NS			
Public & Private Water Supply				NEI		NEI			NEI			
Fish Consumption				NS								

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes

Fish & Wildlife Propagation not supporting for Lead
Fish Consumption not supporting for Lead

Muddy Boggy Creek at Unger

Sample Record	Times Visited	Station ID
July 1999 - Current	176	410400010070-001AT

Stream Data

County	Choctaw	Request Data By Email
Location	East of the Town of Unger on US 70	
Latitude/Longitude	34.02512076, -95.7511845	
Planning Watershed	Blue-Boggy (8-digit HUC -11140103)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	159	18.8	19.4	2.8/36.3	11.6/26.1	
	Turbidity (NTU)	160	111	64	3/857	36/118	36% of values>OWQS
	pH (units)	158	7.69	7.70	6.71/8.21	7.53/7.91	
	Dissolved Oxygen (mg/L)	159	8.35	7.84	3.87/40.07	6.35/10.16	
	Hardness (mg/L)	160	136	139	21/268	104/175	
Minerals	Total Dissolved Solids (mg/L)	42	286	263	95/921	197/310	
	Specific Conductivity (uS/cm)	158	372	380	100/937	235/478	
	Chloride (mg/L)	106	48	36	<10/199	14/66	
	Sulfate (mg/L)	106	35	31	13/134	23/41	
Nutrients	Total Phosphorus (mg/L)	161	0.129	0.092	<0.005/1.017	0.064/0.150	
	Total Nitrogen (mg/L)	161	0.87	0.74	<0.10/2.19	0.55/1.06	
	Nitrate/Nitrite (mg/L)	160	0.13	0.08	<0.05/0.88	<0.05/0.19	
	Chlorophyll A (mg/m^3)	64	9.3	9.1	<0.1/22.3	3.9/14.0	TSI=52.5
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	42	641	94	<10/8000	28/732	Mean>OWQS
	E. Coli (cfu/100ml)(*-Geo. Mn.)	42	247	52	<10/2755	18/196	

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	NS	S	S	S						S	NEI	S
Aesthetics												S
Agriculture					S		S	S				
Primary Body Contact Recreation									NS			
Public & Private Water Supply				NEI		NEI			NEI			
Fish Consumption				NS								

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes: *Fish Consumption not supporting for Lead*

Neosho River at Chouteau

Sample Record	Times Visited	Station ID
November 1998 - Current	170	121600010280-001AT

Stream Data

County	Mayes	Request Data By Email
Location	East of the Town of Chouteau on US 412	
Latitude/Longitude	36.17655098, -95.27570708	
Planning Watershed	Grand (8-digit HUC - 11070209)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	151	17.9	19.0	3.8/35.3	10.4/24.8	
	Turbidity (NTU)	152	14	10	3/72	8/15	
	pH (units)	151	7.93	7.93	7.11/9.41	7.62/8.20	
	Dissolved Oxygen (mg/L)	151	9.37	8.90	2.45/17.25	7.47/11.35	See Notes
	Hardness (mg/L)	152	128	126	75/204	113/140	
Minerals	Total Dissolved Solids (mg/L)	36	169	166	128/240	152/176	
	Specific Conductivity (uS/cm)	151	291	292	141/610	251/323	
	Chloride (mg/L)	88	<10	<10	<10/26	<10/12	
	Sulfate (mg/L)	88	34	32	22/157	27/35	
Nutrients	Total Phosphorus (mg/L)	160	0.222	0.136	<0.005/1.380	0.092/0.246	
	Total Nitrogen (mg/L)	160	1.17	1.07	0.49/2.41	0.86/1.47	
	Nitrate/Nitrite (mg/L)	161	0.51	0.44	<0.05/1.40	0.21/0.74	
	Chlorophyll A (mg/m^3)	98	15.6	13.1	1.5/70.0	7.2/19.0	TSI=57.5
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	44	85	<10	<10/1400	<10/26	
	E. Coli (cfu/100ml)(*-Geo. Mn.)	44	45	<10	<10/882	<10/20	

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	S	S	NS	S						S	S	S
Aesthetics												S
Agriculture					S		S	S				
Primary Body Contact Recreation									S			
Public & Private Water Supply				S		S			S			
Fish Consumption				S								

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes

Upstream water quality probes show numerous samples were below 2 mg/L

Neosho River at Commerce

Sample Record	Times Visited	Station ID
October 2000 - Current	160	121600040220-001AT

Stream Data

County	Ottawa	Request Data By Email
Location	West of the Town of Commerce on County Road E60	
Latitude/Longitude	36.92899836, -94.95707349	
Planning Watershed	Grand (8-digit HUC - 11070206)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	140	16.9	17.8	0.3/33.2	8.9/25.2	
In-Situ	Turbidity (NTU)	142	114	53	4/>1000	25/99	21% of values>OWQS
In-Situ	pH (units)	141	7.91	7.96	6.53/9.05	7.71/8.14	
In-Situ	Dissolved Oxygen (mg/L)	141	9.06	8.40	3.34/15.43	7.14/11.02	
In-Situ	Hardness (mg/L)	141	181	177	15/345	146/221	
Minerals	Total Dissolved Solids (mg/L)	21	291	263	140/578	194/351	
Minerals	Specific Conductivity (uS/cm)	141	380	378	81/701	300/452	
Minerals	Chloride (mg/L)	97	11	<10	<10/20	<10/13	
Minerals	Sulfate (mg/L)	97	63	61	22/166	41/77	
Nutrients	Total Phosphorus (mg/L)	152	0.914	0.163	0.007/109.000	0.101/0.250	
Nutrients	Total Nitrogen (mg/L)	152	1.39	1.17	0.30/4.42	0.69/1.78	
Nutrients	Nitrate/Nitrite (mg/L)	152	0.41	0.26	<0.05/3.59	<0.05/0.56	
Nutrients	Chlorophyll A (mg/m^3)	111	18.8	12.6	<0.1/200.0	6.2/22.6	TSI=59.4
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	42	7325	76	<10/282000	26/673	Mean>OWQS
Bacteria	E. Coli (cfu/100ml)(*-Geo. Mn.)	42	454	31	<10/8074	<10/81	

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	NS	S	S	NS						S	S	NS
Aesthetics												S
Agriculture					S		S	S				
Primary Body Contact Recreation									NS			
Public & Private Water Supply				NEI		NEI			NEI			
Fish Consumption				NS								

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes: *Fish Consumption not supporting for Lead*

Neosho River at Connor Bridge

Sample Record	Times Visited	Station ID
December 1998 – March 2007	105	121600040010-001AT

Stream Data

County	Ottawa	Request Data By Email
Location	Northeast of the Town of Fairland on County Road S 590	
Latitude/Longitude	36.79864906, -94.81927419	
Planning Watershed	Grand (8-digit HUC -11070206)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	68	17.5	18.0	2.9/33.1	8.3/24.5	
	Turbidity (NTU)	68	87	37	4/>1000	17/97	
	pH (units)	67	7.83	7.80	6.66/9.33	7.43/8.20	
	Dissolved Oxygen (mg/L)	68	8.54	8.35	1.69/13.58	6.59/11.03	
	Hardness (mg/L)	69	181	191	76/277	135/218	
Minerals	Total Dissolved Solids (mg/L)	69	233	235	88/413	193/273	
	Specific Conductivity (uS/cm)	68	376	377	137/860	301/449	
	Chloride (mg/L)	69	12	<10	<10/31	<10/12	
	Sulfate (mg/L)	69	66	67	<10/117	47/86	
Nutrients	Total Phosphorus (mg/L)	70	0.198	0.163	0.047/0.890	0.118/0.251	
	Total Nitrogen (mg/L)	68	1.29	1.18	0.31/3.14	0.77/1.54	
	Nitrate/Nitrite (mg/L)	69	0.44	0.30	<0.05/1.63	0.12/0.72	
	Chlorophyll A (mg/m^3)	15	13.9	11.4	0.9/45.4	4.6/18.0	TSI=56.4
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	23	1697	<10	<10/37000	<10/30	
	E. Coli (cfu/100ml)(*-Geo. Mn.)	23	152	<10	<10/2359	<10/52	

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	S	S	S	S						U	S	S
Aesthetics												NEI
Agriculture					S		S	S				
Primary Body Contact Recreation									S			
Public & Private Water Supply				NEI		NEI			NEI			
Fish Consumption				S								

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes

U = Assessment yielded undetermined supporting status

Neosho River at Langley

Sample Record	Times Visited	Station ID
December 1998 - Current	177	121600020170-001AT

Stream Data

County	Mayes	Request Data By Email
Location	South of the Town of Langley on State Highway 82	
Latitude/Longitude	36.44372767, -95.05554329	
Planning Watershed	Grand (8-digit HUC - 11070209)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	154	16.4	17.1	2.1/27.1	10.2/23.2	
	Turbidity (NTU)	157	9	6	1/59	4/10	
	pH (units)	154	7.74	7.75	6.89/9.26	7.52/7.99	
	Dissolved Oxygen (mg/L)	155	8.19	7.93	2.12/15.73	6.16/10.34	
	Hardness (mg/L)	156	128	125	11/236	113/143	
Minerals	Total Dissolved Solids (mg/L)	38	170	166	125/283	150/185	
	Specific Conductivity (uS/cm)	155	267	271	<10/475	243/299	
	Chloride (mg/L)	114	<10	<10	<10/65	<10/<10	
	Sulfate (mg/L)	114	28	27	17/61	23/31	
Nutrients	Total Phosphorus (mg/L)	166	0.089	0.081	<0.005/0.251	0.060/0.112	
	Total Nitrogen (mg/L)	166	1.04	0.94	0.30/3.56	0.73/1.24	
	Nitrate/Nitrite (mg/L)	167	0.53	0.47	<0.05/3.14	0.26/0.69	
	Chlorophyll A (mg/m^3)	106	5.3	3.9	0.6/23.2	2.2/6.7	TSI=47.0
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	41	36	<10	<10/300	<10/31	
	E. Coli (cfu/100ml)(*-Geo. Mn.)	41	13	<10	<10/86	<10/<10	

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	S	S	NS	S						U	NEI	S
Aesthetics												S
Agriculture					S		S	S				
Primary Body Contact Recreation									S			
Public & Private Water Supply				NEI		NEI			NEI			
Fish Consumption				S								

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes

U = Assessment yielded undetermined supporting status

North Canadian River at Dustin

Sample Record	Times Visited	Station ID
November 1998 – May 2008	122	520500010110-001AT

Stream Data

County	McIntosh	Request Data By Email
Location	North of the Town of Dustin on State Highway 84	
Latitude/Longitude	35.31617996, -95.95493326	
Planning Watershed	Eufaula (8-digit HUC - 11100302)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	86	18.2	18.2	-0.5/34.4	10.8/26.2	
In-Situ	Turbidity (NTU)	85	246	133	21/>1000	55/294	78% of values>OWQS
In-Situ	pH (units)	85	8.27	8.23	7.02/9.48	7.94/8.58	
In-Situ	Dissolved Oxygen (mg/L)	85	9.18	8.98	3.89/16.80	7.22/10.99	
In-Situ	Hardness (mg/L)	87	242	210	89/1900	163/260	
Minerals	Total Dissolved Solids (mg/L)	86	455	451	127/800	367/581	
Minerals	Specific Conductivity (uS/cm)	85	725	710	199/1271	587/921	
Minerals	Chloride (mg/L)	90	107	113	15/218	73/137	
Minerals	Sulfate (mg/L)	89	98	89	34/316	61/119	
Nutrients	Total Phosphorus (mg/L)	90	0.475	0.394	0.147/1.220	0.323/0.598	
Nutrients	Total Nitrogen (mg/L)	88	2.31	2.08	0.59/5.44	1.60/2.86	
Nutrients	Nitrate/Nitrite (mg/L)	90	0.59	0.28	<0.05/3.49	<0.05/0.76	
Nutrients	Chlorophyll A (mg/m^3)	13	93.6	50.3	11.5/287.5	21.1/148.0	TSI=75.0
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	25	861	200	<10/12000	20/537	Mean>OWQS
Bacteria	E. Coli (cfu/100ml)(*-Geo. Mn.)	25	75	<10	<10/528	<10/80	

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	NS	S	S	S						U	S	S
Aesthetics												NEI
Agriculture					S		S	S				
Primary Body Contact Recreation									NS			
Public & Private Water Supply				NEI		NEI			NEI			
Fish Consumption				NS								

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes

Fish Consumption not supporting for Lead
U = Assessment yielded undetermined supporting status

North Canadian River at El Reno

Sample Record	Times Visited	Station ID
November 1998 - Current	174	520530000010-001AT

Stream Data

County	Canadian	Request Data By Email
Location	North of the Town of El Reno on US 81	
Latitude/Longitude	35.56261214, -97.95884556	
Planning Watershed	Central (8-digit HUC -11100301)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	164	17.6	18.3	-0.3/34.8	9.2/25.4	
In-Situ	Turbidity (NTU)	161	50	19	2/>1000	7/46	
In-Situ	pH (units)	161	8.16	8.18	7.10/9.30	7.96/8.35	
In-Situ	Dissolved Oxygen (mg/L)	164	9.63	9.19	0.34/18.69	7.85/11.41	
In-Situ	Hardness (mg/L)	164	456	456	<10/1080	390/520	
Minerals	Total Dissolved Solids (mg/L)	104	860	889	326/1200	795/964	
Minerals	Specific Conductivity (uS/cm)	164	1328	1415	<10/2270	1209/1535	
Minerals	Chloride (mg/L)	163	142	145	<10/239	117/180	
Minerals	Sulfate (mg/L)	163	280	281	111/474	227/329	
Nutrients	Total Phosphorus (mg/L)	165	0.158	0.119	0.005/1.450	0.064/0.217	
Nutrients	Total Nitrogen (mg/L)	164	1.04	0.89	<0.10/4.70	0.65/1.35	
Nutrients	Nitrate/Nitrite (mg/L)	163	0.13	<0.05	<0.05/0.69	<0.05/0.19	
Nutrients	Chlorophyll A (mg/m^3)	98	21.9	13.4	0.5/143.0	4.3/30.2	TSI=60.9
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	36	459	135	<10/6000	45/288	Mean>OWQS
Bacteria	E. Coli (cfu/100ml)(*-Geo. Mn.)	36	205	31	<10/2420	<10/116	

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	S	S	S	S						S	S	S
Aesthetics												S
Agriculture					S		S	S				
Primary Body Contact Recreation									NS			
Public & Private Water Supply				S		S			S			
Fish Consumption				S								

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes

North Canadian River at Harrah

Sample Record	Times Visited	Station ID
November 1998 – December 2012	97	520510000110-001AT

Stream Data

County	Oklahoma	Request Data By Email
Location	North of the Town of Harrah on State Highway 62	
Latitude/Longitude	35.50033302, -97.19429527	
Planning Watershed	Central (8-digit HUC - 11100302)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	81	19.9	12.8	1.9/33.0	18.6/24.9	
	Turbidity (NTU)	80	118	20	4/>1000	42/80	44% of values>OWQS
	pH (units)	80	8.20	7.84	6.31/8.57	7.33/7.68	
	Dissolved Oxygen (mg/L)	81	9.83	7.84	1.41/26.38	6.60/8.41	
	Hardness (mg/L)	80	314	203	<10/693	74/99	
Minerals	Total Dissolved Solids (mg/L)	18	596	498	62/254	113/145	
	Specific Conductivity (uS/cm)	81	937	740	18/1291	179/252	
	Chloride (mg/L)	81	131	98	<10/178	<10/18	
	Sulfate (mg/L)	80	128	88	12/369	34/50	
Nutrients	Total Phosphorus (mg/L)	81	1.028	0.573	0.007/1.060	0.077/0.122	
	Total Nitrogen (mg/L)	80	4.31	2.64	0.23/3.39	0.81/1.08	
	Nitrate/Nitrite (mg/L)	81	2.76	0.91	<0.05/1.17	0.11/0.25	
	Chlorophyll A (mg/m^3)	24	45.4	22.3	0.5/33.0	3.7/4.9	TSI=68.0
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	27	1470	85	<10/14136	36/198	Mean>OWQS
	E. Coli (cfu/100ml)(*-Geo. Mn.)	27	915	20	<10/19863	68/273	

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	NS	S	S	S						S	S	S
Aesthetics												NEI
Agriculture					S		S	S				
Primary Body Contact Recreation									NS			
Public & Private Water Supply				S		S			S			
Fish Consumption				NS								

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes: *Fish Consumption not supporting for Lead*

North Canadian River at Seiling

Sample Record	Times Visited	Station ID
November 1998 - Current	173	720500010010-001AT

Stream Data

County	Major	Request Data By Email
Location	North of the Town of Seiling on US 281	
Latitude/Longitude	36.18359095, -98.92046478	
Planning Watershed	Panhandle (8-digit HUC -11100301)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	164	17.1	17.0	-0.5/36.5	10.5/24.3	
	Turbidity (NTU)	165	37	16	1/>1000	5/38	
	pH (units)	160	8.16	8.18	7.19/9.10	8.06/8.30	
	Dissolved Oxygen (mg/L)	163	10.14	10.00	1.20/21.73	8.49/11.63	
	Hardness (mg/L)	163	559	550	40/2098	455/637	
Minerals	Total Dissolved Solids (mg/L)	103	1091	1100	532/1350	1010/1200	
	Specific Conductivity (uS/cm)	163	1577	1596	547/3250	1445/1741	
	Chloride (mg/L)	162	189	185	<10/540	168/211	
	Sulfate (mg/L)	163	350	352	106/669	294/404	
Nutrients	Total Phosphorus (mg/L)	162	0.103	0.084	<0.005/0.363	0.042/0.129	
	Total Nitrogen (mg/L)	164	1.05	1.00	<0.10/2.58	0.73/1.34	
	Nitrate/Nitrite (mg/L)	163	0.32	0.20	<0.05/1.19	<0.05/0.53	
	Chlorophyll A (mg/m^3)	58	8.6	5.2	0.9/52.5	2.1/9.9	TSI=51.7
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	33	2651	160	<10/76000	31/450	Mean>OWQS
	E. Coli (cfu/100ml)(*-Geo. Mn.)	33	155	31	<10/3130	<10/102	

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	S	S	S	S						NS	S	S
Aesthetics												S
Agriculture					S		S	S				
Primary Body Contact Recreation									NS			
Public & Private Water Supply				S		S			S			
Fish Consumption				S								

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes

North Canadian River at Shawnee

Sample Record	Times Visited	Station ID
February 2002 - 2012	105	520510000110-005AT

Stream Data

County	Pottawatomie	Request Data by Email
Location	East of the Town of Shawnee on State Highway 3E	
Latitude/Longitude	35.41056345, -96.78883533	
Planning Watershed	Central (8-digit HUC - 11100302)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	86	17.9	10.4	-1.0/35.5	18.8/26.4	
	Turbidity (NTU)	87	133	22	5/>1000	38/125	33% of values>OWQS
	pH (units)	85	8.30	7.93	7.15/9.18	8.33/8.60	
	Dissolved Oxygen (mg/L)	85	10.30	8.06	4.16/19.26	9.88/12.95	
	Hardness (mg/L)	84	260	207	142/1050	521/632	
Minerals	Total Dissolved Solids (mg/L)	35	579	558	470/7500	3790/4933	14% of values>OWQS
	Specific Conductivity (uS/cm)	86	854	688	465/13560	5826/8374	
	Chloride (mg/L)	85	119	94	168/4490	1805/2463	
	Sulfate (mg/L)	84	112	78	61/660	338/421	
Nutrients	Total Phosphorus (mg/L)	87	0.887	0.618	0.112/1.370	0.301/0.455	
	Total Nitrogen (mg/L)	87	4.34	2.95	0.83/6.62	1.70/2.26	
	Nitrate/Nitrite (mg/L)	87	2.34	1.04	<0.05/4.96	0.31/0.91	
	Chlorophyll A (mg/m^3)	52	92.5	40.5	0.7/474.0	46.0/82.2	TSI=75.0
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	30	1674	18	<10/4000	120/400	Mean>OWQS
	E. Coli (cfu/100ml)(*-Geo. Mn.)	30	1189	<10	<10/3654	26/186	

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	NS	S	S	S						S	S	S
Aesthetics												NEI
Agriculture					S		S	NS				
Primary Body Contact Recreation									NS			
Public & Private Water Supply				S		S			S			
Fish Consumption				S								

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes

North Canadian River at Wetumka

Sample Record	Times Visited	Station ID
September 1999 - Current	169	520510000010-001AT

Stream Data

County	Hughes	Request Data By Email
Location	Northeast of the Town of Wetumka on US 75	
Latitude/Longitude	35.26449455, -96.20706383	
Planning Watershed	Central (8-digit HUC -11100302)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	156	19.0	19.8	0.8/36.2	12.2/26.8	
In-Situ	Turbidity (NTU)	158	212	98	16/>1000	44/247	40% of values>OWQS
In-Situ	pH (units)	155	8.41	8.33	7.47/9.90	8.07/8.76	31% of values>OWQS
In-Situ	Dissolved Oxygen (mg/L)	155	10.24	10.03	4.64/19.46	7.97/12.24	
In-Situ	Hardness (mg/L)	156	235	202	60/2500	172/264	
Minerals	Total Dissolved Solids (mg/L)	94	445	449	238/726	376/512	
Minerals	Specific Conductivity (uS/cm)	156	740	742	244/1208	631/884	
Minerals	Chloride (mg/L)	158	102	108	11/260	81/126	
Minerals	Sulfate (mg/L)	157	90	82	23/247	62/106	
Nutrients	Total Phosphorus (mg/L)	160	0.577	0.483	0.049/1.510	0.393/0.718	
Nutrients	Total Nitrogen (mg/L)	159	2.98	2.73	0.61/6.39	2.00/3.87	
Nutrients	Nitrate/Nitrite (mg/L)	160	0.91	0.43	<0.05/4.89	<0.05/1.38	
Nutrients	Chlorophyll A (mg/m^3)	100	122.0	85.9	4.4/515.0	46.5/188.8	TSI=77.7
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	54	1503	105	<10/34000	28/520	Mean>OWQS
Bacteria	E. Coli (cfu/100ml)(*-Geo. Mn.)	54	315	26	<10/7701	<10/136	

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	NS	NS	S	S						NS	S	S
Aesthetics												NEI
Agriculture					S		S	S				
Primary Body Contact Recreation									NS			
Public & Private Water Supply				S		S			S			
Fish Consumption				NS								

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes: *Fish Consumption not supporting for Lead*

North Canadian River at Woodward

Sample Record	Times Visited	Station ID
October 2000 - Current	154	720500010140-001AT

Stream Data

County	Woodward	Request Data By Email
Location	East of the Town of Woodward on US 412	
Latitude/Longitude	36.43687215, -99.27835799	
Planning Watershed	Panhandle (8-digit HUC -11100301)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	142	18.8	19.2	0.3/35.9	12.5/26.0	
	Turbidity (NTU)	144	18	8	2/125	4/24	
	pH (units)	138	8.22	8.22	7.40/9.15	7.99/8.43	
	Dissolved Oxygen (mg/L)	140	11.12	10.74	4.67/23.29	8.87/12.68	
	Hardness (mg/L)	142	578	530	188/3620	420/716	
Minerals	Total Dissolved Solids (mg/L)	82	1417	1505	384/2160	1138/1725	
	Specific Conductivity (uS/cm)	142	1939	1873	650/3361	1474/2423	
	Chloride (mg/L)	143	301	262	95/600	211/385	
	Sulfate (mg/L)	142	355	330	78/743	225/471	
Nutrients	Total Phosphorus (mg/L)	143	0.210	0.153	0.009/0.845	0.087/0.313	
	Total Nitrogen (mg/L)	145	2.20	1.72	<0.10/7.55	1.30/2.90	
	Nitrate/Nitrite (mg/L)	144	1.21	0.78	<0.05/5.91	0.41/1.76	
	Chlorophyll A (mg/m^3)	83	23.7	11.9	2.4/489.0	6.3/22.5	TSI=61.7
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	34	2456	186	<10/65000	53/625	Mean>OWQS
	E. Coli (cfu/100ml)(*-Geo. Mn.)	34	635	41	<10/19863	20/63	

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	S	S	S	S						S	U	S
Aesthetics												S
Agriculture					S		S	S				
Primary Body Contact Recreation									NS			
Public & Private Water Supply				S		S			S			
Fish Consumption				S								

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes

U = Assessment yielded undetermined supporting status

Poteau River at Heavener

Sample Record	Times Visited	Station ID
November 1998 – December 2012	141	220100020010-001AT

Stream Data

County	LeFlore	Request Data By Email
Location	South of the Town of Heavener on State Highway 59	
Latitude/Longitude	34.85833476, -94.62923436	
Planning Watershed	Lower Arkansas (8-digit HUC - 11110105)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	118	19.0	12.1	1.9/32.6	18.0/25.5	
In-Situ	Turbidity (NTU)	121	23	11	2/944	20/46	
In-Situ	pH (units)	118	7.27	6.92	7.15/9.16	8.13/8.37	
In-Situ	Dissolved Oxygen (mg/L)	118	8.19	6.58	4.51/16.94	9.78/11.10	
In-Situ	Hardness (mg/L)	118	48	21	136/490	239/282	
Minerals	Total Dissolved Solids (mg/L)	20	94	53	209/1460	785/973	
Minerals	Specific Conductivity (uS/cm)	118	136	57	411/3436	1418/1821	
Minerals	Chloride (mg/L)	77	<10	<10	26/815	283/428	
Minerals	Sulfate (mg/L)	78	35	16	27/205	104/121	
Nutrients	Total Phosphorus (mg/L)	114	0.075	0.038	0.073/0.810	0.193/0.237	
Nutrients	Total Nitrogen (mg/L)	112	0.67	0.46	0.40/3.18	1.29/1.59	
Nutrients	Nitrate/Nitrite (mg/L)	113	0.19	<0.05	<0.05/1.60	0.54/0.78	
Nutrients	Chlorophyll A (mg/m^3)	13	9.5	3.2	1.2/140.0	14.3/34.8	TSI=52.7
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	28	65	<10	<10/2420	57/140	Mean>OWQS
Bacteria	E. Coli (cfu/100ml)(*-Geo. Mn.)	28	58	13	<10/1515	<10/104	

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	S	S	S	S						S	NEI	S
Aesthetics												S
Agriculture					S		S	S				
Primary Body Contact Recreation									NS			
Public & Private Water Supply				NEI		NEI			NEI			
Fish Consumption				S								

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes

Poteau River at Pocola

Sample Record	Times Visited	Station ID
November 1998 - Current	191	220100010010-001AT

Stream Data

County	LeFlore	Request Data By Email
Location	West of the Town of Pocola on County Road E 1220	
Latitude/Longitude	35.23864842, -94.52021262	
Planning Watershed	Lower Arkansas (8-digit HUC -11110105)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	184	18.9	19.9	2.9/34.6	11.2/26.0	
	Turbidity (NTU)	193	69	50	11/476	35/83	13% of values>OWQS
	pH (units)	188	7.31	7.28	5.39/8.99	6.97/7.63	
	Dissolved Oxygen (mg/L)	189	8.16	7.97	3.31/15.94	6.54/9.58	
	Hardness (mg/L)	191	51	47	<10/414	35/57	
Minerals	Total Dissolved Solids (mg/L)	37	114	96	16/675	71/132	
	Specific Conductivity (uS/cm)	185	144	134	<10/530	85/177	
	Chloride (mg/L)	98	<10	<10	<10/33	<10/<10	
	Sulfate (mg/L)	98	36	33	<10/88	25/45	
Nutrients	Total Phosphorus (mg/L)	191	0.120	0.104	0.017/0.416	0.072/0.146	
	Total Nitrogen (mg/L)	188	1.10	0.98	0.17/6.45	0.79/1.22	
	Nitrate/Nitrite (mg/L)	190	0.36	0.24	0.03/4.96	0.13/0.43	
	Chlorophyll A (mg/m^3)	104	16.6	14.9	1.9/77.3	9.7/21.5	TSI=58.2
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	48	173	40	<10/2420	20/72	
	E. Coli (cfu/100ml)(*-Geo. Mn.)	48	136	26	<10/2420	<10/41	

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	NS	S	S	NS						S	S	S
Aesthetics												S
Agriculture					S		S	S				
Primary Body Contact Recreation									S			
Public & Private Water Supply				NEI		NEI			NEI			
Fish Consumption				NS								

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes

Fish & Wildlife Propagation not supporting for Lead
Fish Consumption not supporting for Lead

Sampling and Assessment by the **Oklahoma Water Resources Board** – 3800 Classen Blvd, Oklahoma City, OK, 73118 – 405.530.8800 – http://www.owrb.ok.gov

North Fork of the Red River at Carter

Sample Record	Times Visited	Station ID
November 1998 - Current	167	311510010010-001AT

Stream Data

County	Beckham	Request Data By Email
Location	South of the Town of Carter on State Highway 34	
Latitude/Longitude	35.16712931, -99.50730365	
Planning Watershed	Southwest (8-digit HUC -11120302)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	147	18.4	18.9	-0.9/37.1	10.6/25.1	
	Turbidity (NTU)	152	50	14	1/>1000	6/35	
	pH (units)	145	8.09	8.11	7.61/8.55	7.94/8.23	
	Dissolved Oxygen (mg/L)	147	10.39	9.40	5.33/113.98	8.11/10.99	
	Hardness (mg/L)	150	952	947	89/1960	820/1081	
Minerals	Total Dissolved Solids (mg/L)	91	2014	1921	1132/3420	1770/2160	
	Specific Conductivity (uS/cm)	147	2832	2766	970/5645	2477/3135	
	Chloride (mg/L)	152	406	393	39/1100	308/470	
	Sulfate (mg/L)	152	744	732	64/1450	612/888	
Nutrients	Total Phosphorus (mg/L)	149	0.074	0.032	<0.005/1.333	0.019/0.061	
	Total Nitrogen (mg/L)	150	1.00	0.88	<0.10/3.17	0.67/1.21	
	Nitrate/Nitrite (mg/L)	150	0.32	0.21	<0.05/2.77	<0.05/0.48	
	Chlorophyll A (mg/m^3)	69	11.4	7.8	0.9/70.7	3.2/14.0	TSI=54.4
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	27	300	30	<10/2420	<10/90	
	E. Coli (cfu/100ml)(*-Geo. Mn.)	27	193	20	<10/1733	11/96	

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	S	S	S	S						S	NEI	S
Aesthetics												S
Agriculture					S		S	S				
Primary Body Contact Recreation									S			
Public & Private Water Supply				S		S			S			
Fish Consumption				S								

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes

North Fork of the Red River at Headrick

Sample Record	Times Visited	Station ID
November 1998 - Current	217	311500010020-001AT

Stream Data

County	Tillman	Request Data By Email
Location	East of the Town of Headrick on US 62	
Latitude/Longitude	34.6379245, -99.10311528	
Planning Watershed	Southwest (8-digit HUC -11120303)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	200	19.3	19.9	-1.2/35.3	11.7/27.3	
	Turbidity (NTU)	209	126	11	1/>1000	6/44	
	pH (units)	197	8.05	8.10	6.80/9.10	7.86/8.22	
	Dissolved Oxygen (mg/L)	200	9.58	9.25	3.57/15.21	8.24/11.04	
	Hardness (mg/L)	205	1127	1120	100/4154	865/1384	
Minerals	Total Dissolved Solids (mg/L)	157	5713	5200	660/13700	3985/6905	90% of values>OWQS
	Specific Conductivity (uS/cm)	201	8924	8506	594/23053	5986/11036	
	Chloride (mg/L)	215	2648	2346	151/9620	1490/3260	98% of values>OWQS
	Sulfate (mg/L)	214	780	762	34/2702	612/910	30% of values>OWQS
Nutrients	Total Phosphorus (mg/L)	181	0.138	0.043	<0.005/2.461	0.026/0.088	
	Total Nitrogen (mg/L)	173	1.06	0.75	0.27/7.28	0.62/1.17	
	Nitrate/Nitrite (mg/L)	174	0.22	<0.05	<0.05/1.52	<0.05/0.30	
	Chlorophyll A (mg/m^3)	104	18.9	11.9	0.2/269.0	5.8/22.0	TSI=59.4
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	29	1198	200	<10/19863	51/750	Mean>OWQS
	E. Coli (cfu/100ml)(*-Geo. Mn.)	29	486	143	<10/8164	74/396	Mean>OWQS

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	S	S	S	NS						S	NS	S
Aesthetics												S
Agriculture					NS		NS	NS				
Primary Body Contact Recreation									NS			
Public & Private Water Supply				NEI		NEI			NEI			
Fish Consumption				S								

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes: *Fish & Wildlife Propagation not supporting for Selenium*

North Fork of the Red River at Tipton

Sample Record	Times Visited	Station ID
February 2013 - Current	48	311500010020-002AT

Stream Data

County	Tillman	Request Data By Email
Location	West of the Town of Tipton on State Highway 5	
Latitude/Longitude	34.506944, -99.207778	
Planning Watershed	Southwest (8-digit HUC -11120303)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	45	20.4	21.3	1.7/33.0	14.9/26.1	
In-Situ	Turbidity (NTU)	47	106	20	7/>1000	11/55	12% of values>OWQS
In-Situ	pH (units)	45	8.31	8.29	7.58/9.33	8.02/8.62	
In-Situ	Dissolved Oxygen (mg/L)	45	11.83	11.08	6.20/20.51	8.66/14.19	
In-Situ	Hardness (mg/L)	47	1036	1056	169/1680	840/1240	
Minerals	Total Dissolved Solids (mg/L)	49	4670	4430	488/7820	3160/6665	90% of values>OWQS
Minerals	Specific Conductivity (uS/cm)	45	7787	7575	711/13832	5145/11160	
Minerals	Chloride (mg/L)	49	2289	2140	104/4280	1355/3420	98% of values>OWQS
Minerals	Sulfate (mg/L)	49	652	676	120/1030	559/758	30% of values>OWQS
Nutrients	Total Phosphorus (mg/L)	49	0.618	0.417	0.083/2.520	0.225/0.846	
Nutrients	Total Nitrogen (mg/L)	49	2.04	1.80	1.02/4.77	1.53/2.31	
Nutrients	Nitrate/Nitrite (mg/L)	49	0.78	0.58	0.15/2.24	0.39/1.14	
Nutrients	Chlorophyll A (mg/m^3)	49	28.0	20.8	4.4/66.4	15.1/41.1	TSI=63.3
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	4	1700	1700	1414/1986	1414/1986	Mean>OWQS
Bacteria	E. Coli (cfu/100ml)(*-Geo. Mn.)	4	214	214	99/330	99/330	Mean>OWQS

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	NS	S	S	NS						S	NEI	S
Aesthetics												S
Agriculture					NS		NS	NS				
Primary Body Contact Recreation									NS			
Public & Private Water Supply				S		S			S			
Fish Consumption				S								

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes: *Fish & Wildlife Propagation not supporting for Selenium*

Sampling and Assessment by the **Oklahoma Water Resources Board** – 3800 Classen Blvd, Oklahoma City, OK, 73118 – 405.530.8800 – http://www.owrb.ok.gov

Red River at Burkburnett

Sample Record	Times Visited	Station ID
January 2013 - Current	48	311310010010-002AT

Stream Data

County	Cotton	Request Data By Email
Location	North of the Town of Burkburnett, Texas on Interstate 44	
Latitude/Longitude	34.2095473, -98.33061891	
Planning Watershed	Beaver-Cache (8-digit HUC - 11130102)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	47	18.4	16.8	2.9/30.1	14.3/24.6	
	Turbidity (NTU)	47	401	104	10/>1000	31/>1000	28% of values>OWQS
	pH (units)	47	7.99	8.01	7.55/8.30	7.81/8.20	
	Dissolved Oxygen (mg/L)	47	9.49	9.11	6.88/13.85	7.72/10.43	
	Hardness (mg/L)	47	1638	1490	44/2820	1190/1910	
Minerals	Total Dissolved Solids (mg/L)	49	6186	6660	1820/10200	4840/7495	100% of values>OWQS
	Specific Conductivity (uS/cm)	47	10359	10687	3243/18690	8314/11728	
	Chloride (mg/L)	49	2971	3140	735/5320	2160/3510	100% of values>OWQS
	Sulfate (mg/L)	49	1225	1250	406/1950	1017/1385	100% of values>OWQS
Nutrients	Total Phosphorus (mg/L)	49	1.005	0.166	0.032/5.900	0.106/1.470	
	Total Nitrogen (mg/L)	49	3.80	1.60	0.97/17.97	1.39/5.12	
	Nitrate/Nitrite (mg/L)	49	0.33	<0.05	<0.05/1.49	<0.05/0.60	
	Chlorophyll A (mg/m^3)	49	37.4	35.2	3.3/99.6	20.1/47.9	TSI=66.1
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	10	1997	2420	308/2420	1892/2420	
	E. Coli (cfu/100ml)(*-Geo. Mn.)	10	1284	1120	461/2420	955/1580	

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	NS	S	S	NS						NS	S	S
Aesthetics												NEI
Agriculture					NS		NS	NS				
Primary Body Contact Recreation									NEI			
Public & Private Water Supply				NEI		NEI			NEI			
Fish Consumption				S								

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes: *Fish & Wildlife Propagation not supporting for Selenium*

Red River at Davidson

Sample Record	Times Visited	Station ID
November 1998 - Current	207	311310010010-001AT

Stream Data

County	Tillman	Request Data By Email
Location	South of the Town of Davidson on State Highway 183	
Latitude/Longitude	34.2115454, -99.08155505	
Planning Watershed	Beaver-Cache (8-digit HUC - 11130102)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	195	18.9	19.9	-0.8/34.5	11.5/25.3	
	Turbidity (NTU)	199	262	64	5/>1000	23/256	28% of values>OWQS
	pH (units)	193	8.07	8.10	6.98/9.12	7.92/8.23	
	Dissolved Oxygen (mg/L)	195	10.18	9.75	0.48/21.97	8.26/12.01	
	Hardness (mg/L)	198	1391	1365	277/2700	1059/1750	
Minerals	Total Dissolved Solids (mg/L)	150	5267	5328	520/13600	3935/6605	100% of values>OWQS
	Specific Conductivity (uS/cm)	196	8081	8398	1261/21375	6089/9778	
	Chloride (mg/L)	206	2189	2115	219/5980	1553/2720	100% of values>OWQS
	Sulfate (mg/L)	206	1177	1105	182/6680	874/1350	100% of values>OWQS
Nutrients	Total Phosphorus (mg/L)	168	0.437	0.181	<0.005/9.400	0.104/0.346	
	Total Nitrogen (mg/L)	168	2.40	1.56	0.58/34.95	1.17/2.18	
	Nitrate/Nitrite (mg/L)	169	0.40	0.19	<0.05/2.34	<0.05/0.67	
	Chlorophyll A (mg/m^3)	99	49.6	42.2	1.6/192.0	22.0/69.0	TSI=68.9
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	27	2093	80	<10/21000	<10/2420	Mean>OWQS
	E. Coli (cfu/100ml)(*-Geo. Mn.)	27	1370	96	<10/17329	20/281	

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	NS	S	S	NS						S	S	S
Aesthetics												NEI
Agriculture					NS		NS	NS				
Primary Body Contact Recreation									NS			
Public & Private Water Supply				NEI		NEI			NEI			
Fish Consumption				S								

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes

Fish & Wildlife Propagation not supporting for Selenium

Red River at Harris

Sample Record	Times Visited	Station ID
November 1998 - Current	174	410100010010-001AT

Stream Data

County	McCurtain	Request Data By Email
Location	South of the Town of Harris on State Highway 259	
Latitude/Longitude	33.68687568, -94.69422864	
Planning Watershed	Southeast (8-digit HUC - 11140106)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	156	19.9	20.6	3.0/33.5	13.3/26.9	
	Turbidity (NTU)	162	72	42	9/614	24/85	22% of values>OWQS
	pH (units)	157	7.96	8.00	7.10/8.74	7.78/8.18	
	Dissolved Oxygen (mg/L)	156	8.60	8.43	4.17/13.86	7.34/9.83	
	Hardness (mg/L)	159	266	275	14/758	190/324	
Minerals	Total Dissolved Solids (mg/L)	99	567	576	112/1204	348/813	
	Specific Conductivity (uS/cm)	156	1042	1060	156/2423	655/1475	
	Chloride (mg/L)	162	168	165	<10/395	88/240	
	Sulfate (mg/L)	162	147	146	38/308	88/195	
Nutrients	Total Phosphorus (mg/L)	163	0.130	0.102	0.022/0.715	0.079/0.150	
	Total Nitrogen (mg/L)	164	0.97	0.90	<0.10/2.81	0.70/1.16	
	Nitrate/Nitrite (mg/L)	163	0.13	<0.05	<0.05/0.78	<0.05/0.20	
	Chlorophyll A (mg/m^3)	76	25.1	23.9	2.9/87.8	14.6/34.1	TSI=62.2
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	51	53	23	<10/600	<10/60	
	E. Coli (cfu/100ml)(*-Geo. Mn.)	51	20	<10	<10/134	<10/21	

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	NS	S	S	S						U	S	S
Aesthetics												NEI
Agriculture					S		S	S				
Primary Body Contact Recreation									S			
Public & Private Water Supply				NEI		NEI			NEI			
Fish Consumption				NS								

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes

Fish Consumption not supporting for Lead
U = Assessment yielded undetermined supporting status

Red River at Hugo

Sample Record	Times Visited	Station ID
November 1998 - Current	200	410400010010-001AT

Stream Data

County	Choctaw	Request Data By Email
Location	South of the Town of Hugo on State Highway 271	
Latitude/Longitude	33.87545921, -95.50182137	
Planning Watershed	Blue-Boggy (8-digit HUC - 11140101)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	159	19.3	19.7	3.5/34.4	12.3/27.0	
	Turbidity (NTU)	161	78	35	7/766	22/67	
	pH (units)	158	8.04	8.07	6.79/8.73	7.84/8.27	
	Dissolved Oxygen (mg/L)	159	9.52	9.30	4.18/39.16	7.91/10.92	
	Hardness (mg/L)	160	288	298	66/480	236/347	
Minerals	Total Dissolved Solids (mg/L)	104	660	690	130/1080	511/862	
	Specific Conductivity (uS/cm)	159	1167	1213	210/2739	913/1520	
	Chloride (mg/L)	164	195	210	<10/394	134/265	
	Sulfate (mg/L)	164	160	160	32/320	111/208	
Nutrients	Total Phosphorus (mg/L)	172	0.116	0.083	0.013/0.925	0.059/0.127	
	Total Nitrogen (mg/L)	163	0.94	0.85	0.24/2.87	0.67/1.01	
	Nitrate/Nitrite (mg/L)	163	0.16	0.06	<0.05/0.82	<0.05/0.23	
	Chlorophyll A (mg/m^3)	79	20.6	18.5	2.7/56.0	9.4/28.3	TSI=60.3
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	44	379	42	<10/3300	<10/475	
	E. Coli (cfu/100ml)(*-Geo. Mn.)	44	124	<10	<10/1607	<10/102	

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	S	S	S	S						NEI	NEI	S
Aesthetics												S
Agriculture					S		S	S				
Primary Body Contact Recreation									S			
Public & Private Water Supply				NEI		NEI			NEI			
Fish Consumption				S								

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes

Red River at Terral

Sample Record	Times Visited	Station ID
December 1998 - Current	170	311100010190-001AT

Stream Data

County	Jefferson	Request Data By Email
Location	South of the Town of Terral on State Highway 81	
Latitude/Longitude	33.8786094, -97.93457247	
Planning Watershed	Lower Washita (8-digit HUC - 11130201)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	162	20.4	21.2	3.1/38.4	13.5/27.4	
In-Situ	Turbidity (NTU)	163	308	98	4/>1000	43/455	50% of values>OWQS
In-Situ	pH (units)	161	8.22	8.25	6.73/9.11	8.01/8.47	
In-Situ	Dissolved Oxygen (mg/L)	162	10.45	10.24	3.42/20.13	7.96/12.72	
In-Situ	Hardness (mg/L)	163	817	808	168/2075	555/1055	
Minerals	Total Dissolved Solids (mg/L)	103	2910	2810	442/6840	1700/3804	
Minerals	Specific Conductivity (uS/cm)	161	4961	4941	157/14458	3482/6512	
Minerals	Chloride (mg/L)	164	1237	1200	151/4200	797/1600	
Minerals	Sulfate (mg/L)	164	616	606	96/2110	373/768	
Nutrients	Total Phosphorus (mg/L)	173	0.462	0.297	0.021/4.210	0.197/0.471	
Nutrients	Total Nitrogen (mg/L)	166	2.45	1.91	<0.10/23.10	1.42/2.80	
Nutrients	Nitrate/Nitrite (mg/L)	165	0.48	0.23	<0.05/3.77	<0.05/0.74	
Nutrients	Chlorophyll A (mg/m^3)	82	74.1	59.4	<0.1/368.0	34.9/94.0	TSI=72.8
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	35	658	62	<10/3654	<10/700	Mean>OWQS
Bacteria	E. Coli (cfu/100ml)(*-Geo. Mn.)	35	124	33	<10/1106	<10/155	

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	NS	S	S	NS						U	U	S
Aesthetics												NEI
Agriculture					S		S	S				
Primary Body Contact Recreation									NS			
Public & Private Water Supply				NEI		NEI			NEI			
Fish Consumption				NS								

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes

Fish Consumption not supporting for Lead
Fish & Wildlife Propagation not supporting for Selenium
U = Assessment yielded undetermined supporting status

Salt Fork Of The Red River at Elmer

Sample Record	Times Visited	Station ID
November 1998 - Current	210	311600020010-002AT

Stream Data

County	Jackson	Request Data By Email
Location	West of the Town of Elmer near US 283	
Latitude/Longitude	34.47893211, -99.38286717	
Planning Watershed	Southwest (8-digit HUC -11120202)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	195	19.6	19.9	0.5/34.7	13.0/26.7	
In-Situ	Turbidity (NTU)	199	92	24	3/>1000	12/53	12% of values>OWQS
In-Situ	pH (units)	191	8.02	8.06	7.42/8.56	7.88/8.18	
In-Situ	Dissolved Oxygen (mg/L)	195	9.87	10.08	3.59/17.59	8.07/11.75	
In-Situ	Hardness (mg/L)	201	1557	1600	200/2513	1195/1976	
Minerals	Total Dissolved Solids (mg/L)	153	3041	3180	240/4860	2530/3750	
Minerals	Specific Conductivity (uS/cm)	196	3994	4013	356/7648	3274/4743	
Minerals	Chloride (mg/L)	211	626	580	19/2097	472/804	29% of values>OWQS
Minerals	Sulfate (mg/L)	210	1294	1310	87/3485	985/1633	28% of values>OWQS
Nutrients	Total Phosphorus (mg/L)	171	0.121	0.079	<0.005/0.840	0.038/0.145	
Nutrients	Total Nitrogen (mg/L)	171	2.25	1.98	0.59/7.14	1.33/2.69	
Nutrients	Nitrate/Nitrite (mg/L)	172	1.13	0.85	<0.05/5.93	0.22/1.55	
Nutrients	Chlorophyll A (mg/m^3)	78	24.9	18.6	<0.1/83.5	9.7/39.5	TSI=62.1
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	24	3290	530	<10/51800	100/1414	Mean>OWQS
Bacteria	E. Coli (cfu/100ml)(*-Geo. Mn.)	24	560	57	<10/5172	23/611	

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	NS	S	S	NS						U	U	S
Aesthetics												S
Agriculture					NS		NS	S				
Primary Body Contact Recreation									NS			
Public & Private Water Supply				NS		S			S			
Fish Consumption				NS								

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes

Fish Consumption not supporting for Lead
Fish & Wildlife Propagation and Private & Public Water Supply not supporting for Selenium
U = Assessment yielded undetermined supporting status

Salt Fork Of The Red River at Mangum

Sample Record	Times Visited	Station ID
October 2000 – September 2007	54	311600020010-001AT

Stream Data

County	Greer	Request Data By Email
Location	South of the Town of Mangum on State Highway 34	
Latitude/Longitude	34.85764987, -99.50925729	
Planning Watershed	Southwest (8-digit HUC -11120202)	

Parameters

	Parameter (Descriptions)	Mean	Median	Range	Comments
In-Situ	Water Temperature (C°)	18.6	18.9	2.7/37.0	
	Turbidity (NTU)	9	6	1/30	
	pH (units)	7.93	7.96	6.60/8.56	
	Dissolved Oxygen (ppm)	8.61	8.22	5.62/12.84	
	Hardness (ppm)	1532	1501	660/2380	
Minerals	Total Dissolved Solids (ppm)	2216	2115	799/8895	
	Specific Conductivity (uS)	3584	3238	1369/21559	
	Chloride (ppm)	278	270	63/464	
	Sulfate (ppm)	1254	1300	471.0/1800	
Nutrients	Total Phosphorus (ppm)	0.028	0.016	0.007/0.154	
	Nitrate/Nitrite (ppm)	0.26	0.21	<0.05/0.97	
	Chlorophyll A (mg/m^3)	54.3	38.4	6.0/175.0	TSI=69.8
Bacteria	Fecal Coliform (cfu/100ml)(*-Geo. Mn.)	271.1*	310	<10/3400	
	Enterococcus (cfu/100ml)(*-Geo. Mn.)	240.7*	167	<10/11000	Mean>OWQS
	E. Coli (MPN/100ml)(*-Geo. Mean)	84.9*	74	<10/1785	

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	S	S	S	S						NS	S	S
Aesthetics												NEI
Agriculture					S		S	S				
Primary Body Contact Recreation									NS			
Public & Private Water Supply				NEI		NEI			NEI			
Fish Consumption				S								

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes

Sampling and Assessment by the **Oklahoma Water Resources Board** – 3800 Classen Blvd, Oklahoma City, OK, 73118 – 405.530.8800 – http://www.owrb.ok.gov

Sager Creek at West Siloam Springs

Sample Record	Times Visited	Station ID
November 1998 – December 2012	163	121700060080-001AT

Stream Data

County	Delaware	Request Data By Email
Location	West of the Town of West Siloam Springs off US Highway 412	
Latitude/Longitude	36.20164298, -94.60538182	
Planning Watershed	Lower Arkansas (8-digit HUC - 11110103)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	110	17.4	12.5	2.8/36.3	19.4/26.1	
	Turbidity (NTU)	111	3	1	3/857	64/118	
	pH (units)	109	7.71	7.47	6.71/8.21	7.70/7.91	
	Dissolved Oxygen (mg/L)	110	9.11	8.05	3.87/40.07	7.84/10.16	21% of values<OWQS and 13% of values<alt OWQS
	Hardness (mg/L)	109	132	120	21/268	139/175	
Minerals	Total Dissolved Solids (mg/L)	21	244	186	95/921	263/310	
	Specific Conductivity (uS/cm)	110	424	358	100/937	380/478	
	Chloride (mg/L)	100	36	23	<10/199	36/66	
	Sulfate (mg/L)	100	25	16	13/134	31/41	
Nutrients	Total Phosphorus (mg/L)	114	1.117	0.644	<0.005/1.017	0.092/0.150	
	Total Nitrogen (mg/L)	113	7.46	4.88	<0.10/2.19	0.74/1.06	
	Nitrate/Nitrite (mg/L)	114	7.02	4.39	<0.05/0.88	0.08/0.19	
	Chlorophyll A (mg/m^3)	54	1.6	0.4	<0.1/22.3	9.1/14.0	TSI=35.5
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	56	512	34	<10/8000	94/732	Mean>OWQS
	E. Coli (cfu/100ml)(*-Geo. Mn.)	56	218	<10	<10/2755	52/196	

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	S	S	NS	S						S	S	S
Aesthetics												NEI
Agriculture					S		S	S				
Primary Body Contact Recreation									NS			
Public & Private Water Supply				S		S			S			
Fish Consumption				S								

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes

Salt Fork of the Arkansas River at Ingersoll

Sample Record	Times Visited	Station ID
December 1998 - Current	165	621010010160-001AT

Stream Data

County	Alfalfa	Request Data By Email
Location	Northeast of the Town of Ingersoll on State Highway 58	
Latitude/Longitude	36.82018011, -98.35994081	
Planning Watershed	Upper Arkansas (8-digit HUC - 11060002)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	158	18.0	18.1	-0.8/36.7	9.9/26.9	
	Turbidity (NTU)	160	84	30	1/>1000	10/77	11% of values>OWQS
	pH (units)	156	7.94	7.96	7.15/8.42	7.83/8.11	
	Dissolved Oxygen (mg/L)	158	9.87	9.37	4.49/26.91	8.20/11.50	
	Hardness (mg/L)	157	893	884	432/1660	801/978	
Minerals	Total Dissolved Solids (mg/L)	89	1591	1560	520/3170	1490/1670	
	Specific Conductivity (uS/cm)	158	2047	2060	905/3688	1870/2232	
	Chloride (mg/L)	156	181	174	29/591	133/215	
	Sulfate (mg/L)	157	731	733	150/1130	665/800	
Nutrients	Total Phosphorus (mg/L)	158	0.094	0.052	<0.005/1.710	0.027/0.096	
	Total Nitrogen (mg/L)	158	1.12	0.86	<0.10/18.71	0.71/1.11	
	Nitrate/Nitrite (mg/L)	158	0.37	0.36	<0.05/1.05	0.22/0.49	
	Chlorophyll A (mg/m^3)	65	6.9	4.4	<0.1/53.4	2.4/7.0	TSI=49.5
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	34	5045	1918	74/46080	532/5000	Mean>OWQS
	E. Coli (cfu/100ml)(*-Geo. Mn.)	34	1434	355	20/19863	121/1553	Mean>OWQS

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	NS	S	S	S						U	S	S
Aesthetics												S
Agriculture					S		S	S				
Primary Body Contact Recreation									NS			
Public & Private Water Supply				S		S			S			
Fish Consumption				S								

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes

U = Assessment yielded undetermined supporting status

Salt Fork of the Arkansas River at Tonkawa

Sample Record	Times Visited	Station ID
October 2000 - Current	149	621000010010-001AT

Stream Data

County	Kay	Request Data By Email
Location	South of the Town of Tonkawa on US 77	
Latitude/Longitude	36.67070374, -97.30951657	
Planning Watershed	Upper Arkansas (8-digit HUC -11060004)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	146	17.9	18.8	-0.9/36.6	9.3/26.6	
	Turbidity (NTU)	144	113	44	6/>1000	20/139	35% of values>OWQS
	pH (units)	146	8.18	8.20	7.00/9.45	8.00/8.40	
	Dissolved Oxygen (mg/L)	146	10.58	10.26	3.77/24.35	8.21/12.93	
	Hardness (mg/L)	145	471	471	126/930	379/550	
Minerals	Total Dissolved Solids (mg/L)	76	3462	2785	544/9680	1925/4370	
	Specific Conductivity (uS/cm)	146	5183	4261	563/15758	2848/6433	
	Chloride (mg/L)	141	1549	1221	223/5320	751/1905	
	Sulfate (mg/L)	141	283	267	49/637	214/357	
Nutrients	Total Phosphorus (mg/L)	141	0.239	0.221	0.060/0.975	0.149/0.303	
	Total Nitrogen (mg/L)	141	1.58	1.49	0.36/3.42	1.19/1.84	
	Nitrate/Nitrite (mg/L)	141	0.15	<0.05	<0.05/1.12	<0.05/0.13	
	Chlorophyll A (mg/m^3)	78	65.4	50.8	2.7/262.0	29.7/84.8	TSI=71.6
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	30	6728	984	20/161000	275/1925	Mean>OWQS
	E. Coli (cfu/100ml)(*-Geo. Mn.)	31	434	41	<10/9804	<10/122	

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	NS	S	S	S						S	U	S
Aesthetics												NEI
Agriculture					S		S	S				
Primary Body Contact Recreation									NS			
Public & Private Water Supply				S		S			S			
Fish Consumption				NS								

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes

Fish Consumption not supporting for Lead
U = Assessment yielded undetermined supporting status

Sandy Creek at Eldorado

Sample Record	Times Visited	Station ID
November 1998 - Current	171	311600010040-001AT

Stream Data

County	Jackson	Request Data By Email
Location	Southwest of the Town of Eldorado on State Highway 6	
Latitude/Longitude	34.46433562, -99.66255838	
Planning Watershed	Southwest (8-digit HUC -11130101)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	160	18.8	19.6	2.7/33.2	13.5/24.9	
	Turbidity (NTU)	168	72	42	4/>1000	23/73	37% of values>OWQS
	pH (units)	157	7.75	7.73	7.09/8.44	7.56/7.91	
	Dissolved Oxygen (mg/L)	160	10.92	11.00	2.59/24.06	7.47/14.01	
	Hardness (mg/L)	165	2393	2528	115/3974	2210/2813	
Minerals	Total Dissolved Solids (mg/L)	104	6180	6540	283/7320	6222/6820	94% of values>OWQS
	Specific Conductivity (uS/cm)	160	8640	9267	282/11175	8672/9643	
	Chloride (mg/L)	167	2039	2120	13/3750	1920/2280	100% of Values>OWQS
	Sulfate (mg/L)	168	1905	2010	45/3680	1720/2188	97% of Values>OWQS
Nutrients	Total Phosphorus (mg/L)	167	0.124	0.080	<0.005/1.356	0.043/0.152	
	Total Nitrogen (mg/L)	167	3.68	3.68	0.54/8.38	3.12/4.25	
	Nitrate/Nitrite (mg/L)	168	2.31	2.30	0.11/4.86	1.47/3.11	
	Chlorophyll A (mg/m^3)	49	38.4	19.6	1.3/179.0	7.0/55.6	TSI=66.4
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	25	2737	900	<10/37300	132/2420	Mean>OWQS
	E. Coli (cfu/100ml)(*-Geo. Mn.)	25	365	131	<10/3448	42/418	

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	NS	S	S	NS						NS	U	S
Aesthetics												S
Agriculture					NS		NS	NS				
Primary Body Contact Recreation									NS			
Public & Private Water Supply				NS		S			S			
Fish Consumption				S								

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes

Public & Private Water Supply not supporting for Selenium
Fish & Wildlife Propagation not supporting for Selenium
U = Assessment yielded undetermined supporting status

Sampling and Assessment by the **Oklahoma Water Resources Board** – 3800 Classen Blvd, Oklahoma City, OK, 73118 – 405.530.8800 – http://www.owrb.ok.gov

Skeleton Creek at Lovell

Sample Record	Times Visited	Station ID
December 1998 - Current	169	620910030010-001AT

Stream Data

County	Logan	Request Data By Email
Location	East of the Town of Lovell on State Highway 74	
Latitude/Longitude	36.06098714, -97.58584155	
Planning Watershed	Upper Arkansas (8-digit HUC -11050002)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	166	16.8	16.8	-1.4/33.9	7.8/25.0	
In-Situ	Turbidity (NTU)	168	142	77	4/>1000	42/145	36% of values>OWQS
In-Situ	pH (units)	166	8.23	8.21	7.51/9.08	8.02/8.43	
In-Situ	Dissolved Oxygen (mg/L)	165	10.28	9.86	2.69/25.20	7.52/12.49	
In-Situ	Hardness (mg/L)	166	376	402	100/690	283/472	
Minerals	Total Dissolved Solids (mg/L)	99	927	956	264/1950	758/1140	
Minerals	Specific Conductivity (uS/cm)	166	1610	1623	338/2904	1233/2011	
Minerals	Chloride (mg/L)	166	235	238	52/458	184/284	
Minerals	Sulfate (mg/L)	166	236	203	64/3200	155/245	
Nutrients	Total Phosphorus (mg/L)	167	0.529	0.466	0.078/1.630	0.331/0.705	
Nutrients	Total Nitrogen (mg/L)	166	4.68	4.01	0.67/15.51	2.92/5.95	
Nutrients	Nitrate/Nitrite (mg/L)	167	3.28	2.57	<0.05/14.55	1.39/4.57	
Nutrients	Chlorophyll A (mg/m^3)	45	57.4	36.8	1.9/233.0	18.7/78.3	TSI=70.3
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	37	3017	510	20/41000	72/2420	Mean>OWQS
Bacteria	E. Coli (cfu/100ml)(*-Geo. Mn.)	37	686	110	<10/9804	26/474	

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	NS	S	S	NS						S	S	S
Aesthetics												NEI
Agriculture					S		S	S				
Primary Body Contact Recreation									NS			
Public & Private Water Supply				NEI		NEI			NEI			
Fish Consumption				S								

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes: *Fish & Wildlife Propagation not supporting for Selenium*

Spring Creek at Murphy

Sample Record	Times Visited	Station ID
November 1998 - Current	183	121600010290-001AT

Stream Data

County	Mayes	Request Data By Email
Location	South of the Town of Locust Grove off State Highway 82	
Latitude/Longitude	36.13104241, -95.19015604	
Planning Watershed	Grand (8-digit HUC -11070209)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	150	16.9	16.8	7.2/26.8	12.1/21.7	
	Turbidity (NTU)	150	2	1	0/15	½	
	pH (units)	149	7.50	7.49	6.80/8.59	7.26/7.75	
	Dissolved Oxygen (mg/L)	150	9.12	9.00	2.68/13.82	7.79/10.51	
	Hardness (mg/L)	150	87	80	<10/728	72/90	
Minerals	Total Dissolved Solids (mg/L)	39	113	104	<10/498	89/114	
	Specific Conductivity (uS/cm)	149	171	164	32/425	146/194	
	Chloride (mg/L)	123	9	10	<10/96	<10/<10	
	Sulfate (mg/L)	122	9	10	<10/40	<10/<10	
Nutrients	Total Phosphorus (mg/L)	157	0.020	0.013	<0.005/0.392	0.008/0.018	
	Total Nitrogen (mg/L)	159	0.65	0.57	<0.10/3.03	0.40/0.78	
	Nitrate/Nitrite (mg/L)	159	0.51	0.45	<0.05/1.50	0.30/0.64	
	Chlorophyll A (mg/m^3)	95	1.0	0.4	<0.1/29.5	0.2/0.7	TSI=30.2
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	56	156	17	<10/3000	<10/106	Mean>OWQS
	E. Coli (cfu/100ml)(*-Geo. Mn.)	56	97	<10	<10/4352	<10/28	

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	S	S	S	S						S	S	S
Aesthetics												S
Agriculture					S		S	S				
Primary Body Contact Recreation									NS			
Public & Private Water Supply				S		S			S			
Fish Consumption				S								

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes

Spring River at Quapaw

Sample Record	Times Visited	Station ID
December 1998 - Current	183	121600070010-001AT

Stream Data

County	Ottawa	Request Data By Email
Location	East of the Town of Quapaw near State Highway 137	
Latitude/Longitude	36.93462871, -94.74614371	
Planning Watershed	Grand (8-digit HUC -11070207)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	162	17.4	17.4	1.0/32.1	10.3/24.4	
In-Situ	Turbidity (NTU)	162	34	14	1/581	9/24	19% of values>OWQS
In-Situ	pH (units)	161	7.88	7.90	6.64/8.92	7.69/8.06	
In-Situ	Dissolved Oxygen (mg/L)	162	9.00	8.93	0.16/14.90	7.21/10.67	
In-Situ	Hardness (mg/L)	161	159	165	17/258	142/182	
Minerals	Total Dissolved Solids (mg/L)	38	213	218	101/331	167/245	
Minerals	Specific Conductivity (uS/cm)	162	364	369	111/827	311/419	
Minerals	Chloride (mg/L)	118	14	12	<10/36	<10/17	
Minerals	Sulfate (mg/L)	117	36	34	18/80	28/42	
Nutrients	Total Phosphorus (mg/L)	172	0.196	0.171	0.048/0.640	0.132/0.246	
Nutrients	Total Nitrogen (mg/L)	172	2.35	2.32	0.49/4.78	1.81/2.84	
Nutrients	Nitrate/Nitrite (mg/L)	173	1.66	1.71	<0.05/3.37	1.11/2.15	
Nutrients	Chlorophyll A (mg/m^3)	91	8.8	7.8	1.4/37.4	3.6/13.0	TSI=52.0
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	43	1622	20	<10/33000	<10/180	
Bacteria	E. Coli (cfu/100ml)(*-Geo. Mn.)	43	288	20	<10/3448	<10/121	

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	NS	S	S	S						S	U	S
Aesthetics												S
Agriculture					S		S	S				
Primary Body Contact Recreation									S			
Public & Private Water Supply				NEI		NEI			NEI			
Fish Consumption				S								

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes

U = Assessment yielded undetermined supporting status

Verdigris River at Inola

Sample Record	Times Visited	Station ID
November 2000 - Current	103	121500020260-001AT

Stream Data

County	Rogers	Request Data By Email
Location	West of Inola on US 412	
Latitude/Longitude	36.16167837, -95.49637137	
Planning Watershed	Middle Arkansas (8-digit HUC -11070105)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	100	18.0	19.4	3.3/32.4	10.7/25.5	
	Turbidity (NTU)	98	63	39	3/891	21/62	25% of values>OWQS
	pH (units)	100	7.84	7.82	7.14/8.71	7.62/8.03	
	Dissolved Oxygen (mg/L)	99	9.09	8.26	3.71/18.73	7.14/10.86	
	Hardness (mg/L)	98	144	141	<10/301	124/161	
Minerals	Total Dissolved Solids (mg/L)	20	205	212	151/276	170/233	
	Specific Conductivity (uS/cm)	99	352	326	158/626	292/403	
	Chloride (mg/L)	65	25	18	<10/145	11/34	
	Sulfate (mg/L)	65	46	43	20/129	35/53	
Nutrients	Total Phosphorus (mg/L)	99	0.225	0.173	0.069/1.039	0.118/0.271	
	Total Nitrogen (mg/L)	99	1.77	1.42	0.61/5.98	1.07/2.25	
	Nitrate/Nitrite (mg/L)	99	0.91	0.54	0.13/4.67	0.40/1.33	
	Chlorophyll A (mg/m^3)	65	10.5	6.8	1.2/76.7	3.9/13.4	TSI=53.6
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	25	5498	33	<10/81000	<10/230	Mean>OWQS
	E. Coli (cfu/100ml)(*-Geo. Mn.)	25	514	15	<10/7270	<10/31	

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	NS	S	S	S						U	S	S
Aesthetics												S
Agriculture					S		S	S				
Primary Body Contact Recreation									NS			
Public & Private Water Supply				NEI		NEI			NEI			
Fish Consumption				S								

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes

U = Assessment yielded undetermined supporting status

Verdigris River at Keetonville

Sample Record	Times Visited	Station ID
November 1998 – December 2012	131	121500030010-001AT

Stream Data

County	Rogers	View Site Data
Location	East of the Town of Keetonville on State Highway 20	
Latitude/Longitude	36.30724953, -95.69794268	
Planning Watershed	Middle Arkansas (8-digit HUC -11070105)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	113	17.5	10.3	-0.8/36.7	18.1/26.9	
In-Situ	Turbidity (NTU)	115	68	20	1/>1000	30/77	
In-Situ	pH (units)	114	7.84	7.70	7.15/8.42	7.96/8.11	
In-Situ	Dissolved Oxygen (mg/L)	113	8.79	6.70	4.49/26.91	9.37/11.50	
In-Situ	Hardness (mg/L)	114	156	127	432/1660	884/978	
Minerals	Total Dissolved Solids (mg/L)	35	226	169	520/3170	1560/1670	
Minerals	Specific Conductivity (uS/cm)	111	372	285	905/3688	2060/2232	
Minerals	Chloride (mg/L)	102	22	<10	29/591	174/215	
Minerals	Sulfate (mg/L)	102	46.33	33.38	150/1130	733/800	
Nutrients	Total Phosphorus (mg/L)	116	0.110	0.058	<0.005/1.710	0.052/0.096	
Nutrients	Total Nitrogen (mg/L)	115	0.88	0.63	<0.10/18.71	0.86/1.11	
Nutrients	Nitrate/Nitrite (mg/L)	116	0.27	0.07	<0.05/1.05	0.36/0.49	
Nutrients	Chlorophyll A (mg/m^3)	53	8.5	3.0	<0.1/53.4	4.4/7.0	TSI=51.6
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	21	5094	15	74/46080	1918/5000	Mean>OWQS
Bacteria	E. Coli (cfu/100ml)(*-Geo. Mn.)	21	592	<10	20/19863	355/1553	

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	S	S	S	S						S	NEI	S
Aesthetics												S
Agriculture					S		S	S				
Primary Body Contact Recreation									NS			
Public & Private Water Supply				NEI		NEI			NEI			
Fish Consumption				S								

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes

Verdigris River at Lenepah

Sample Record	Times Visited	Station ID
December 1998 - Current	178	121510020010-001AT

Stream Data

County	Nowata	Request Data By Email
Location	East of the Town of Lenepah on State Highway 10	
Latitude/Longitude	36.85121639, -95.58531345	
Planning Watershed	Middle Arkansas (8-digit HUC -11070103)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	161	17.2	18.3	0.7/33.7	10.2/25.3	
In-Situ	Turbidity (NTU)	168	133	39	4/>1000	17/112	65% of values>OWQS
In-Situ	pH (units)	162	7.85	7.85	4.98/8.78	7.66/8.09	
In-Situ	Dissolved Oxygen (mg/L)	161	9.07	8.37	3.83/18.49	6.94/10.99	
In-Situ	Hardness (mg/L)	164	165	165	<10/300	133/194	
Minerals	Total Dissolved Solids (mg/L)	49	213	211	92/346	169/264	
Minerals	Specific Conductivity (uS/cm)	160	367	373	<10/764	264/463	
Minerals	Chloride (mg/L)	115	20	14	<10/123	<10/22	
Minerals	Sulfate (mg/L)	114	37	33	12/97	27/42	
Nutrients	Total Phosphorus (mg/L)	172	0.165	0.099	0.019/1.220	0.060/0.181	
Nutrients	Total Nitrogen (mg/L)	171	1.28	1.03	0.05/4.55	0.82/1.49	
Nutrients	Nitrate/Nitrite (mg/L)	172	0.39	0.35	<0.05/1.95	0.13/0.53	
Nutrients	Chlorophyll A (mg/m^3)	110	16.9	10.9	<0.1/173.0	4.8/22.3	TSI=58.3
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	35	11155	70	<10/321000	20/1553	Mean>OWQS
Bacteria	E. Coli (cfu/100ml)(*-Geo. Mn.)	35	799	63	<10/6294	30/1236	

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	NS	S	S	NS						S	S	S
Aesthetics												S
Agriculture					S		S	S				
Primary Body Contact Recreation									NS			
Public & Private Water Supply				NEI		NEI			NEI			
Fish Consumption				S								

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes *Fish & Wildlife Propagation not supporting for Lead*

Verdigris River at Wagoner

Sample Record	Times Visited	Station ID
September 1999 - Current	113	121500010200-001AT

Stream Data

County	Wagoner	Request Data By Email
Location	West of the Town of Wagoner on US 51	
Latitude/Longitude	35.95547322, -95.49477619	
Planning Watershed	Middle Arkansas (8-digit HUC -11070105)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	109	18.8	20.4	1.8/32.8	11.3/26.9	
	Turbidity (NTU)	111	52	32	6/383	19/64	15% of values>OWQS
	pH (units)	108	7.82	7.82	6.98/8.84	7.57/8.03	
	Dissolved Oxygen (mg/L)	108	8.96	8.16	4.57/16.44	7.27/10.51	
	Hardness (mg/L)	108	143	140	56/740	119/158	
Minerals	Total Dissolved Solids (mg/L)	59	192	189	108/304	168/206	
	Specific Conductivity (uS/cm)	108	330	325	200/616	276/360	
	Chloride (mg/L)	108	19	14	<10/143	<10/22	
	Sulfate (mg/L)	107	44	41	18/132	33/50	
Nutrients	Total Phosphorus (mg/L)	108	0.153	0.127	0.052/0.570	0.095/0.179	
	Total Nitrogen (mg/L)	108	1.37	1.14	0.48/4.40	0.86/1.56	
	Nitrate/Nitrite (mg/L)	109	0.66	0.48	<0.05/3.02	0.26/0.78	
	Chlorophyll A (mg/m^3)	62	9.0	6.5	<0.1/39.5	3.8/13.4	TSI=52.2
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	28	4699	44	<10/82000	13/1100	Mean>OWQS
	E. Coli (cfu/100ml)(*-Geo. Mn.)	28	258	41	<10/3130	<10/103	

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	NS	S	S	S						U	S	S
Aesthetics												S
Agriculture					S		S	S				
Primary Body Contact Recreation									NS			
Public & Private Water Supply				S		S			S			
Fish Consumption				S								

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes

U = Assessment yielded undetermined supporting status

Walnut Bayou at Burneyville

Sample Record	Times Visited	Station ID
January 2013 - Current	31	311100010250-001AT

Stream Data

County	Love	Request Data By Email
Location	North of the Town of Burneyville on State Highway 96	
Latitude/Longitude	33.916559, -97.282427	
Planning Watershed	Lower Washita (8-digit HUC - 11130201)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	31	19.2	20.5	4.6/33.7	13.4/29.2	
In-Situ	Turbidity (NTU)	31	36	10	3/189	7/33	22% of values>OWQS
In-Situ	pH (units)	31	7.94	7.98	7.38/8.36	7.74/8.07	
In-Situ	Dissolved Oxygen (mg/L)	31	9.69	9.37	6.24/12.54	8.27/11.57	
In-Situ	Hardness (mg/L)	31	256	242	132/685	188/290	
Minerals	Total Dissolved Solids (mg/L)	31	412	353	229/1610	315/423	
Minerals	Specific Conductivity (uS/cm)	31	643	675	372/924	541/745	
Minerals	Chloride (mg/L)	31	63	62	23/124	46/75	
Minerals	Sulfate (mg/L)	31	52	55	27/77	42/59	
Nutrients	Total Phosphorus (mg/L)	31	0.091	0.076	<0.005/0.224	0.033/0.193	
Nutrients	Total Nitrogen (mg/L)	31	0.79	0.61	0.32/1.90	0.53/0.91	
Nutrients	Nitrate/Nitrite (mg/L)	31	0.06	<0.05	<0.05/0.21	<0.05/<0.05	
Nutrients	Chlorophyll A (mg/m^3)	31	6.0	2.8	0.6/29.6	1.4/6.2	TSI=48.1
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	8	735	231	60/2420	75/1901	
Bacteria	E. Coli (cfu/100ml)(*-Geo. Mn.)	8	239	68	<10/816	<10/645	

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	NS	S	S	S						S	S	S
Aesthetics												NEI
Agriculture					S		S	S				
Primary Body Contact Recreation									NEI			
Public & Private Water Supply				S		S			S			
Fish Consumption				S								

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes

Walnut Creek at Purcell

Sample Record	Times Visited	Station ID
February 2015 - Current	25	520610030010-001AT

Stream Data

County	McClain	Request Data By Email
Location	South of the Town of Purcell on US Highway 77	
Latitude/Longitude	34.99932, -97.366951	
Planning Watershed	Central (8-digit HUC - 11090202)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	17	21.4	21.3	9.0/34.4	15.5/26.2	
	Turbidity (NTU)	17	108	10	2/996	4/84	
	pH (units)	17	8.17	8.22	7.58/8.42	8.12/8.30	
	Dissolved Oxygen (mg/L)	17	9.18	8.83	6.46/12.55	7.83/10.58	
	Hardness (mg/L)	17	357	388	182/442	306/406	
Minerals	Total Dissolved Solids (mg/L)	17	427	458	290/521	401/469	
	Specific Conductivity (uS/cm)	17	748	831	367/906	584/871	
	Chloride (mg/L)	19	32	33	<10/46	28/35	
	Sulfate (mg/L)	19	50	51	30/64	46/55	
Nutrients	Total Phosphorus (mg/L)	19	0.092	0.038	0.017/0.484	0.026/0.142	
	Total Nitrogen (mg/L)	19	0.69	0.39	0.27/2.56	0.34/0.79	
	Nitrate/Nitrite (mg/L)	19	0.12	<0.05	<0.05/0.38	<0.05/0.21	
	Chlorophyll A (mg/m^3)	19	3.2	2.3	1.1/6.5	1.6/5.0	TSI=42.0
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	5	1214	816	121/2420	206/2420	
	E. Coli (cfu/100ml)(*-Geo. Mn.)	5	719	118	22/2420	23/1715	

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	NEI	NEI	NEI	NEI						NEI	NEI	NEI
Aesthetics												NEI
Agriculture					NEI		NEI	NEI				
Primary Body Contact Recreation									NEI			
Public & Private Water Supply				NEI		NEI			NEI			
Fish Consumption				NEI								

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes

Washita River at Alex

Sample Record	Times Visited	Station ID
January 2003 – Current	99	310810020010-001AT

Stream Data

County	Grady	Request Data By Email
Location	North of the Town of Alex on Highway 19C	
Latitude/Longitude	34.9261546, -97.77397966	
Planning Watershed	Lower Washita (8-digit HUC -11130303)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	96	18.0	18.4	0.3/35.1	10.9/25.4	
In-Situ	Turbidity (NTU)	96	232	69	6/>1000	25/237	37% of values>OWQS
In-Situ	pH (units)	95	8.05	8.02	7.22/9.26	7.86/8.19	
In-Situ	Dissolved Oxygen (mg/L)	96	9.60	8.96	4.59/15.76	7.68/11.34	
In-Situ	Hardness (mg/L)	96	759	760	180/1668	539/968	
Minerals	Total Dissolved Solids (mg/L)	53	1134	1160	340/1670	826/1450	
Minerals	Specific Conductivity (uS/cm)	95	1570	1667	353/2690	1196/1941	
Minerals	Chloride (mg/L)	97	83	85	11/202	53/116	
Minerals	Sulfate (mg/L)	97	603	614	151/1260	460/765	
Nutrients	Total Phosphorus (mg/L)	97	0.341	0.184	0.010/2.060	0.104/0.365	
Nutrients	Total Nitrogen (mg/L)	97	1.79	1.39	0.68/5.77	1.13/2.12	
Nutrients	Nitrate/Nitrite (mg/L)	97	0.36	0.17	<0.05/1.80	<0.05/0.63	
Nutrients	Chlorophyll A (mg/m^3)	76	45.5	34.0	3.8/169.0	21.2/63.1	TSI=68.1
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	28	1318	148	<10/11000	49/2420	Mean>OWQS
Bacteria	E. Coli (cfu/100ml)(*-Geo. Mn.)	28	681	58	<10/9208	<10/899	

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	NS	S	S	S						U	S	S
Aesthetics												NEI
Agriculture					S		S	S				
Primary Body Contact Recreation									NS			
Public & Private Water Supply				NEI		NEI			NEI			
Fish Consumption				NS								

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes

Fish Consumption not supporting for Lead
U = Assessment yielded undetermined supporting status

Washita River at Anadarko

Sample Record	Times Visited	Station ID
February 1999 - Current	186	310830010010-001AT

Stream Data

County	Caddo	Request Data By Email
Location	North of the Town of Anadarko on US 281	
Latitude/Longitude	35.08448153, -98.24330303	
Planning Watershed	Lower Washita (8-digit HUC -11130302)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	158	18.4	19.8	-0.1/35.0	10.0/26.2	
In-Situ	Turbidity (NTU)	160	165	36	4/>1000	16/125	20% of values>OWQS
In-Situ	pH (units)	156	8.10	8.11	7.01/8.80	7.94/8.25	
In-Situ	Dissolved Oxygen (mg/L)	158	10.00	9.78	1.33/19.66	8.06/12.02	
In-Situ	Hardness (mg/L)	157	845	880	185/1580	596/1058	
Minerals	Total Dissolved Solids (mg/L)	97	1301	1440	150/2260	945/1683	
Minerals	Specific Conductivity (uS/cm)	157	1720	1879	144/2925	1395/2098	
Minerals	Chloride (mg/L)	165	85	85	<10/233	52/113	
Minerals	Sulfate (mg/L)	164	690	747	56/1280	485/859	
Nutrients	Total Phosphorus (mg/L)	165	0.274	0.173	0.026/3.297	0.090/0.274	
Nutrients	Total Nitrogen (mg/L)	164	1.62	1.37	0.52/7.10	0.92/1.94	
Nutrients	Nitrate/Nitrite (mg/L)	165	0.46	0.27	<0.05/2.28	<0.05/0.76	
Nutrients	Chlorophyll A (mg/m^3)	98	40.2	27.9	3.5/597.0	13.6/43.7	TSI=66.8
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	36	1400	435	<10/12997	100/2315	Mean>OWQS
Bacteria	E. Coli (cfu/100ml)(*-Geo. Mn.)	36	514	113	<10/2723	<10/979	

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	NS	S	S	S						NS	U	NS
Aesthetics												S
Agriculture					S		S	S				
Primary Body Contact Recreation									NS			
Public & Private Water Supply				S		S			S			
Fish Consumption				S								

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes

U = Assessment yielded undetermined supporting status

Washita River at Cordell

Sample Record	Times Visited	Station ID
November 1998 - Current	191	310830030010-001AT

Stream Data

County	Washita	Request Data By Email
Location	East of the Town of Cordell on State Highway 152	
Latitude/Longitude	35.29115498, -98.83671818	
Planning Watershed	West Central (8-digit HUC -11130302)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	169	17.4	18.2	-1.0/35.3	9.0/24.7	
	Turbidity (NTU)	167	88	22	3/>1000	8/80	
	pH (units)	166	8.01	8.00	5.93/9.02	7.82/8.18	
	Dissolved Oxygen (mg/L)	167	10.00	9.63	1.95/22.10	7.80/12.03	
	Hardness (mg/L)	169	1320	1334	415/2835	1124/1530	
Minerals	Total Dissolved Solids (mg/L)	109	2116	2170	450/4150	1885/2422	
	Specific Conductivity (uS/cm)	169	2471	2481	348/5634	2139/2802	
	Chloride (mg/L)	168	119	91	<10/862	62/148	
	Sulfate (mg/L)	168	1140	1165	223/1880	1000/1308	29% of values>OWQS
Nutrients	Total Phosphorus (mg/L)	169	0.283	0.202	0.046/3.090	0.136/0.351	
	Total Nitrogen (mg/L)	169	2.01	1.90	<0.10/8.68	1.48/2.42	
	Nitrate/Nitrite (mg/L)	169	0.92	0.86	<0.05/3.09	0.42/1.35	
	Chlorophyll A (mg/m^3)	59	24.3	14.0	1.8/114.0	5.8/22.4	TSI=61.9
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	48	1836	313	<10/24192	99/1450	Mean>OWQS
	E. Coli (cfu/100ml)(*-Geo. Mn.)	48	1613	74	<10/24192	20/264	Mean>OWQS

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	S	S	S	S						NS	S	NEI
Aesthetics												NEI
Agriculture					NS		S	S				
Primary Body Contact Recreation									NS			
Public & Private Water Supply				S		S			S			
Fish Consumption				S								

S = Fully Supporting
NS = Not Supporting
NEI = Not Enough Information

Notes

Washita River at Durwood

Sample Record	Times Visited	Station ID
November 1998 - Current	139	310800020010-001AT

Stream Data

County	Carter	Request Data By Email
Location	Northwest of the Town of Durwood on US 177	
Latitude/Longitude	34.23354963, -96.97638301	
Planning Watershed	Lower Washita (8-digit HUC -11130303)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	132	19.9	20.5	3.8/33.7	13.7/27.1	
	Turbidity (NTU)	129	281	64	4/>1000	36/529	45% of values>OWQS
	pH (units)	131	8.09	8.07	7.10/8.86	7.91/8.23	
	Dissolved Oxygen (mg/L)	132	9.33	8.95	3.45/19.04	7.42/11.00	
	Hardness (mg/L)	131	538	535	187/925	407/670	
Minerals	Total Dissolved Solids (mg/L)	67	867	896	258/1604	660/1130	
	Specific Conductivity (uS/cm)	131	1210	1273	355/2037	936/1552	
	Chloride (mg/L)	133	78	77	<10/163	48/112	
	Sulfate (mg/L)	134	378	379	26/787	270/510	
Nutrients	Total Phosphorus (mg/L)	134	0.351	0.162	0.008/4.183	0.104/0.392	
	Total Nitrogen (mg/L)	133	1.59	1.14	0.33/7.42	0.78/2.12	
	Nitrate/Nitrite (mg/L)	134	0.25	0.06	<0.05/1.04	<0.05/0.41	
	Chlorophyll A (mg/m^3)	69	29.6	19.6	<0.1/177.0	10.9/34.2	TSI=63.8
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	33	401	148	<10/1900	34/550	Mean>OWQS
	E. Coli (cfu/100ml)(*-Geo. Mn.)	33	365	20	<10/8164	<10/220	

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	NS	S	S	S						U	NEI	S
Aesthetics												NEI
Agriculture					S		S	S				
Primary Body Contact Recreation									NS			
Public & Private Water Supply				S		S			S			
Fish Consumption				NS								

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NS = Not Supporting
NEI = Not Enough Information

Notes

Fish Consumption not supporting for Lead
U = Assessment yielded undetermined supporting status

Washita River at McClure

Sample Record	Times Visited	Station ID
November 1998 - Current	113	310840010010-003RS

Stream Data

County	Custer	Request Data By Email
Location	North of the Town of McClure off of State Highway 33	
Latitude/Longitude	35.656289, -99.306207	
Planning Watershed	West Central (8-digit HUC -11130301)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	87	16.9	19.1	-0.8/33.3	9.1/23.6	
	Turbidity (NTU)	90	80	21	1/>1000	8/63	22% of values>OWQS
	pH (units)	87	8.11	8.10	7.46/9.11	7.96/8.23	
	Dissolved Oxygen (mg/L)	86	9.70	9.72	3.77/19.46	8.00/11.18	
	Hardness (mg/L)	88	1150	1145	250/2255	936/1376	
Minerals	Total Dissolved Solids (mg/L)	76	1630	1655	340/2760	1360/2083	
	Specific Conductivity (uS/cm)	87	1941	1984	561/2903	1684/2351	
	Chloride (mg/L)	91	58	62	<10/409	38/72	
	Sulfate (mg/L)	91	901	894	170/1760	636/1160	
Nutrients	Total Phosphorus (mg/L)	90	0.154	0.066	<0.005/1.710	0.040/0.196	
	Total Nitrogen (mg/L)	93	1.53	1.18	<0.10/5.49	0.89/1.71	
	Nitrate/Nitrite (mg/L)	91	0.50	0.26	<0.05/4.96	0.07/0.42	
	Chlorophyll A (mg/m^3)	55	22.3	8.6	1.7/318.0	3.6/14.5	TSI=61.0
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	29	1342	1043	63/5172	165/2420	Mean>OWQS
	E. Coli (cfu/100ml)(*-Geo. Mn.)	29	1693	387	<10/24192	86/2420	Mean>OWQS

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	NS	S	S	S						NS	U	NS
Aesthetics												S
Agriculture					S		S	S				
Primary Body Contact Recreation									NS			
Public & Private Water Supply				S		S			S			
Fish Consumption				NS								

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NS = Not Supporting
NEI = Not Enough Information

Notes

Fish Consumption not supporting for Lead
U = Assessment yielded undetermined supporting status

Washita River at Pauls Valley

Sample Record	Times Visited	Station ID
December 1998 - Current	169	310810010010-001AT

Stream Data

County	Garvin	Request Data By Email
Location	East of the Town of Pauls Valley on county road E1570	
Latitude/Longitude	34.73848401, -97. 16538162	
Planning Watershed	Lower Washita (8-digit HUC -11130303)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	164	18.7	19.5	0.1/34.2	11.3/27.1	
	Turbidity (NTU)	166	274	69	3/>1000	41/415	46% of values>OWQS
	pH (units)	165	8.08	8.10	7.01/8.74	7.96/8.22	
	Dissolved Oxygen (mg/L)	164	9.49	9.24	3.83/22.13	7.57/10.95	
	Hardness (mg/L)	164	633	638	171/1210	472/810	
Minerals	Total Dissolved Solids (mg/L)	103	1020	1030	250/2577	736/1320	
	Specific Conductivity (uS/cm)	166	1407	1480	304/2237	1080/1785	
	Chloride (mg/L)	171	78	74	<10/238	46/103	
	Sulfate (mg/L)	168	503	527	94/1240	362/655	
Nutrients	Total Phosphorus (mg/L)	178	0.370	0.170	0.027/3.160	0.101/0.406	
	Total Nitrogen (mg/L)	169	1.72	1.33	<0.10/7.20	0.93/2.16	
	Nitrate/Nitrite (mg/L)	170	0.29	<0.05	<0.05/1.71	<0.05/0.52	
	Chlorophyll A (mg/m^3)	85	49.9	27.9	1.6/783.0	17.8/51.9	TSI=69.0
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	32	1056	173	<10/10462	46/1965	Mean>OWQS
	E. Coli (cfu/100ml)(*-Geo. Mn.)	32	339	31	<10/3873	<10/180	

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	NS	S	S	S						U	NEI	S
Aesthetics												NEI
Agriculture					S		S	S				
Primary Body Contact Recreation									NS			
Public & Private Water Supply				NEI		NEI			NEI			
Fish Consumption				S								

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NS = Not Supporting
NEI = Not Enough Information

Notes

U = Assessment yielded undetermined supporting status

West Cache Creek at Taylor

Sample Record	Times Visited	Station ID
November 1998 - Current	153	311310020010-001AT

Stream Data

County	Cotton	Request Data By Email
Location	North of the Town of Taylor on State Highway 5B	
Latitude/Longitude	34.2095473, -98.33061891	
Planning Watershed	Beaver-Cache (8-digit HUC - 11130203)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	132	19.4	21.5	2.6/35.2	10.5/27.0	
	Turbidity (NTU)	136	140	44	4/>1000	17/102	19% of values>OWQS
	pH (units)	131	8.03	8.03	6.51/8.78	7.82/8.22	
	Dissolved Oxygen (mg/L)	132	8.59	8.50	3.71/15.30	6.68/10.29	
	Hardness (mg/L)	136	261	209	78/790	142/331	
Minerals	Total Dissolved Solids (mg/L)	82	578	422	144/2260	253/758	40% of values>OWQS
	Specific Conductivity (uS/cm)	131	1082	859	137/4559	513/1372	
	Chloride (mg/L)	140	204	134	<10/1010	61/277	12% of values>OWQS
	Sulfate (mg/L)	140	88	65	18/300	44/115	
Nutrients	Total Phosphorus (mg/L)	140	0.211	0.140	0.031/1.204	0.098/0.270	
	Total Nitrogen (mg/L)	140	1.17	0.81	0.22/6.33	0.60/1.43	
	Nitrate/Nitrite (mg/L)	140	0.30	<0.05	<0.05/2.91	<0.05/0.45	
	Chlorophyll A (mg/m^3)	45	17.9	14.0	1.1/55.1	5.4/25.3	TSI=58.9
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	30	993	350	<10/10000	190/821	Mean>OWQS
	E. Coli (cfu/100ml)(*-Geo. Mn.)	30	414	145	<10/2420	60/488	Mean>OWQS

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	NS	S	S	S						S	NEI	S
Aesthetics												NEI
Agriculture					S		NS	NS				
Primary Body Contact Recreation									NS			
Public & Private Water Supply				NEI		NEI			NEI			
Fish Consumption				S								

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NS = Not Supporting
NEI = Not Enough Information

Notes

Wolf Creek at Ft. Supply

Sample Record	Times Visited	Station ID
November 1998 - Current	158	720500030010-001AT

Stream Data

County	Woodward	Request Data By Email
Location	East of the Town of Ft. Supply off US 270	
Latitude/Longitude	36.44954552, -99.58872133	
Planning Watershed	Panhandle (8-digit HUC -11100203)	

Parameters

	Parameter (Descriptions)	n	Mean	Median	Min./Max	p25/p75	Comments
In-Situ	Water Temperature (°C)	124	17.9	19.0	-0.1/34.0	11.1/25.0	
In-Situ	Turbidity (NTU)	125	21	13	2/81	8/29	
In-Situ	pH (units)	121	8.16	8.16	7.33/9.00	8.03/8.30	
In-Situ	Dissolved Oxygen (mg/L)	123	10.10	10.15	0.12/26.42	8.59/11.33	
In-Situ	Hardness (mg/L)	125	323	312	163/615	280/351	
Minerals	Total Dissolved Solids (mg/L)	64	616	612	424/920	579/642	
Minerals	Specific Conductivity (uS/cm)	123	976	969	464/1835	903/1043	
Minerals	Chloride (mg/L)	125	134	129	89/189	122/145	
Minerals	Sulfate (mg/L)	125	107	104	48/175	91/121	
Nutrients	Total Phosphorus (mg/L)	133	0.055	0.040	<0.005/0.228	0.025/0.072	
Nutrients	Total Nitrogen (mg/L)	127	1.20	1.19	<0.10/2.83	0.89/1.49	
Nutrients	Nitrate/Nitrite (mg/L)	126	0.70	0.69	<0.05/2.20	0.40/0.93	
Nutrients	Chlorophyll A (mg/m^3)	20	6.8	3.9	0.9/21.4	2.5/10.5	TSI=49.4
Bacteria	Enterococcus (cfu/100ml)(*-Geo. Mn.)	23	1156	100	<10/10000	20/900	
Bacteria	E. Coli (cfu/100ml)(*-Geo. Mn.)	23	185	74	<10/2282	30/85	

Beneficial Uses

Click to learn more about Beneficial Uses	Turbidity	pH	Dissolved Oxygen	Metals	Sulfates	Nitrates	Chlorides	Total Dissolved Solids	Bacteria	Bio. Fish	Bio. BMI	Sediment
Fish & Wildlife Propagation	S	S	S	S						S	S	S
Aesthetics												S
Agriculture					S		S	S				
Primary Body Contact Recreation									S			
Public & Private Water Supply				NEI		NEI			NEI			
Fish Consumption				S								

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NS = Not Supporting
NEI = Not Enough Information

Notes