

# **BUFFALO RIVER CONSERVATION COMMITTEE 2020 ANNUAL REPORT**

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Respectfully submitted to:  
The Honorable Asa Hutchinson, Governor  
Co-Chairs of the Arkansas Legislative Council

Prepared by:  
The Arkansas Department of Agriculture with support from Buffalo River Conservation  
Committee members.

# BUFFALO RIVER CONSERVATION COMMITTEE (BRCC) 2020 ANNUAL REPORT

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## BACKGROUND

On September 30, 2016, Governor Hutchinson created the Beautiful Buffalo River Action Committee (BBRAC) to develop an Arkansas-led approach to identify and to address potential concerns in the Buffalo River Watershed. In its creation, Governor Hutchinson directed the BBRAC to initiate the development of a non-regulatory, Buffalo River Watershed Management Plan (WMP).

Beginning in December 2016, four stakeholder meetings were facilitated as part of the development of the voluntary, non-regulatory, WMP for the Buffalo River Watershed. Stakeholders in attendance included farmers, landowners, political representatives, state and federal agencies, and interest groups representing agriculture, conservation, and recreation.

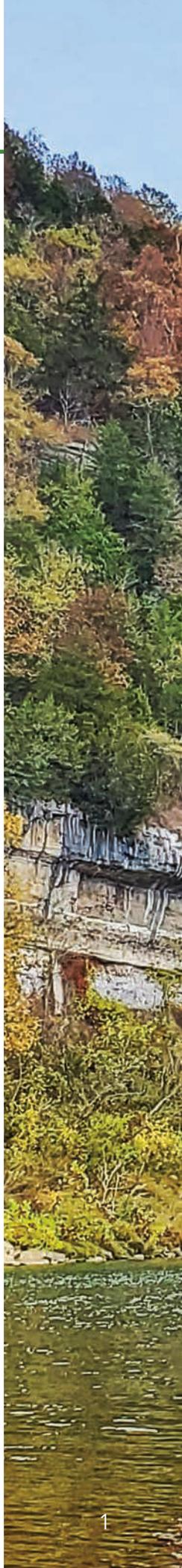
The Buffalo River Watershed Management Plan is a voluntary, non-regulatory, nonpoint source watershed management plan consisting of nine elements. The WMP identified six sub-watersheds as priority areas: Mill Creek (upper), Calf Creek, Bear Creek, Brush Creek, Tomahawk Creek, and Big Creek (lower). It does not include regulated facilities or encompass any management practices for regulated facilities. The Buffalo River Watershed Management Plan was fully accepted by the United States Environmental Protection Agency (EPA) on June 5, 2018 and can be found here <http://adeq.state.ar.us/water/planning/integrated/303d/pdfs/2018/2018-05-22-final-buffalo-river-wmp.pdf>

On September 23, 2019, Governor Hutchinson signed Executive Order 19-14 establishing the Buffalo River Conservation Committee (BRCC) which replaces the Beautiful Buffalo River Action Committee (BBRAC).

The BRCC membership consists of the Secretary of the Department of Agriculture, Secretary of the Department of Energy and Environment, Secretary of the Department of Health, and Secretary of the Department of Parks, Heritage, and Tourism.

The members of the BRCC are required to work in cooperation with one another to identify opportunities to leverage their Department's unique expertise, relationships, focus areas, and funding mechanisms in support of the vitality of the watershed.

The BRCC is required to establish subcommittees that include key stakeholders representing local landowners, conservation organizations, environmental and technical experts, representatives of the tourism industry, local county and municipal officials, and federal partners. The subcommittees will identify opportunities for training, relationship building, and specific projects, all of which will be in service to preserving and enhancing water quality within the Buffalo River Watershed.





## FUNDING

On November 15, 2019, following approval by the Arkansas Legislative Council, \$1 million from the Governor's discretionary fund was transferred to an Arkansas Department of Agriculture fund account to support grants and projects within the Buffalo River Watershed, including but not limited to the following – voluntary best management practices for farmers and landowners, improvements to wastewater and septic systems for cities and counties within the watershed, and reduction of sediment runoff from unpaved roads within the Watershed. An additional \$1 million was pledged by private donors bringing total funding for BRCC efforts to \$2 million.

The \$1 million contribution from private donors was pledged for a proposal to the United States Department of Agriculture (USDA) Regional Conservation Partnership Program (RCPP) titled the Buffalo River Watershed Enhancement Project.

On April 16, 2020, USDA announced the selection of the RCPP proposal for the Buffalo River Watershed Enhancement Project. The \$1 million contribution from private donors is part of \$2,769,100 in partner contributions that leverages \$2,694,805 from the USDA Natural Resources Conservation Service (NRCS) bringing total project funding to \$5,463,905. Additional information about the RCPP project can be found on page 7.

## BUFFALO RIVER WATERSHED OVERVIEW

The Buffalo River Watershed lies within the White River Basin in Northwest Arkansas and encompasses 1,372 miles and 878,080 acres. The watershed is home to approximately 18,000 Arkansans and includes parts of Madison, Newton, Boone, Pope, Marion, Van Buren, Searcy, Baxter, and Stone Counties. The majority of the watershed lies in Newton and Searcy Counties, with the smallest portion lying in Van Buren County.

The Buffalo River is 153 miles (246 km) long. The lower 135 miles (217 km) flow within the boundaries of an area managed by the National Park Service, where the stream is designated the Buffalo National River. The river flows through Newton, Searcy, Marion, and Baxter counties from west to east. The river originates in the highest part of the Boston Mountains in the Ozark mountain range, flows out onto the Springfield Plateau near the historic community of Erbie, and finally crosses a portion of Salem Plateau just before joining the White River. The upper section of the river in the Ozark National Forest is managed by the U.S. Forest Service and is designated as a National Scenic River and a National Wild River; that section is not part of the area managed as a park by the National Park Service, but is managed as part of the Ozark National Forest.

The Buffalo River was designated as the nation's first National River by an Act of Congress on March 1, 1972 through Public Law 92-237. The designation ended the recurring plans of the U.S. Army Corps of Engineers to construct one or more dams on the river. The National River designation protects natural rivers from industrial uses, impoundments, and other obstructions that may change the natural character of the river or disrupt the natural habitat for the flora and fauna that live in or near the river. Three segments totaling 11,978 acres (48.47 km<sup>2</sup>) were designated as Buffalo National River Wilderness in 1975.

Approximately 60% of the land within the Buffalo River Watershed is privately owned. Federal ownership accounts for approximately 37 percent, and three percent of the watershed is state-owned land.

Approximately 79 percent of the watershed is forested, and 14 percent is grassland. The forest type group is classified as predominately Oak-Hickory with some Oak-Pine. The collective land cover of Madison, Newton, Boone, Pope, Marion, Van Buren, Searcy, Baxter, and Stone Counties contains 18.3 million tons of standing pine and more than 126 million tons of standing hardwood.

Agriculture is Arkansas's largest industry, contributing more than \$21 billion to the state's economy annually and providing more than 269,000 jobs. Agriculture is also a significant industry within the nine counties that contain a portion of the Buffalo River Watershed. Collectively, the nine-county area includes 6,832 family farms on 1,606,526 acres. Harvested crop land accounts for 235,838 acres.

Poultry, cattle, and hay are the top three agricultural commodities produced in the region. Based on the most recent USDA data, the market value of farm products is \$815.5 million. In 2019, Searcy County had approximately 36,500 cattle and calves and 2,160 poultry. Livestock inventory in Newton County included approximately 20,000 cattle and calves and 196,000 poultry. In addition, the forest industry provides more than 1,000 jobs in the region.

The Buffalo River Watershed also produces a variety of other agricultural commodities, including pork, vegetables, melons, potatoes, sweet potatoes, fruits, tree nuts, and berries. Agritourism is also expanding within the region.

The Buffalo National River serves as a substantial tourist attraction for Arkansas. Tourism is Arkansas's second largest economic sector providing a \$7.3 billion impact statewide, including \$500 million in state and local taxes. The Buffalo National River draws an estimated 1.2 million visitors annually, arguably one of Arkansas's most popular amenities. These visitors spend an estimated \$55 million in the region, providing income for business operators, creating jobs, and generating local taxes.

More economic and land use data about the Buffalo River Watershed can be found at [agriculture.arkansas.gov/buffalo-river-conservation-committee/](https://agriculture.arkansas.gov/buffalo-river-conservation-committee/).

## **BUFFALO RIVER CONSERVATION COMMITTEE ACHIEVEMENTS**

Despite the many challenges presented by the COVID-19 pandemic, significant progress was made in 2020. A detailed timeline of the BRCC activities and actions is included as Appendix A.

The BRCC and subcommittee members selected the following four topic areas for focus of action and funding: unpaved roads; cost-share programs for agriculture; water and wastewater system infrastructure; and tourism and tourism impacts. Below is a summary for each topic area.

### **Unpaved Roads**

The Buffalo River Watershed includes 2,518 miles of roads, and 2007 miles or 80 percent are unpaved. The majority of unpaved roads are found in two counties; Newton County has 885 miles of unpaved roads and Searcy County has 834 miles. There are 668 points within the watershed where an unpaved road crosses a stream.

Approximately 1,245 miles or 62 percent of unpaved roads in the watershed are under county jurisdiction. Approximately 630 miles or 31 percent of unpaved roads are privately owned. Federal ownership accounts for six percent of the unpaved roads.

Eroding unpaved roads can channel rainfall runoff, increasing erosion and sediment delivery to streams, rivers, and lakes. This sediment can have negative effects for people and nature, including the loss of in-stream habitat for game and non-game fish and other aquatic species, excessive wear and tear on vehicles, high levels of road dust, and excessive road maintenance costs.

The BRCC and subcommittee members solicited feedback from members and interested stakeholders regarding unpaved roads that need assistance and received the following:

Eight unpaved road sites were submitted for funding assistance consideration which included: Cane Branch Road, Richland Road, and Bakers Ford/Woolum Access in Searcy County; Lone Beach Church Road, CR 6450, and Cave Mountain Road in Newton County; and CR 6064 in Marion County.

Cane Branch Road in Searcy County and Cave Mountain Road (to Hawksbill Crag) in Newton County were approved for funding assistance. The total estimated costs for the two sites and contingency expenses are estimated to be approximately \$681,242. The Arkansas Department of Agriculture Natural Resources Division pledged \$110,263 from the federal Nonpoint Source Management Program and the BRCC approved funding assistance of \$570,979.

In addition, one of the first identified projects through the RCPP Buffalo River Watershed Enhancement Project is an unpaved road demonstration project in Searcy County that is expected to be completed in early 2021. Additional information about the RCPP Buffalo River Watershed Enhancement Project can be found on page 7.

Further, on July 8, 2020, Searcy County was selected to receive funding of \$47,408 through the traditional Arkansas Unpaved Roads Program for improvements to a portion of the Richland Road site. The funding provided through the Arkansas Unpaved Roads Program will be matched by \$53,380 from Searcy County. Total costs for the improvements at this site are estimated to be \$100,000.

Additional information about the unpaved roads within the watershed can be found in Appendix B.

## Water and Wastewater Infrastructure

Twenty-four public water systems operate within the Buffalo River Watershed; however, none use the Buffalo as a water source. The Arkansas Department of Energy and Environment's Division of Environmental Quality has issued permits for four wastewater systems within the watershed: the City of Jasper, the City of Marshall, the Buffalo River National Park, and the Marble Falls Suburban Improvement District.

The 2014 Report Card for Arkansas's Infrastructure published by the American Society of Civil Engineers found that Arkansas's public water supply accounts for approximately 404 million gallons per day to serve 2.6 million people. The study estimated that \$6.1 billion of funding will be necessary to keep up with the State's growing drinking water needs through 2034, including replacing or repairing 2,615 miles of water transmission and distribution lines. The majority of infrastructure, 71 percent, in Arkansas is from medium-size system that serve between 3,301 to 100,000 persons.

The Arkansas State Water Plan update in 2014 also identified similar needs for water and wastewater systems in the state. The study projected that Arkansas water providers will need to spend \$5.74 billion to build, maintain, and replace required infrastructure through 2024. Projected spending for similar infrastructure needs by Arkansas wastewater system providers was estimated at \$3.76 billion through 2024.

The BRCC and subcommittee members identified the following three primary concerns related to water and wastewater system infrastructure: limited availability of grant funds; lack of knowledge about funding sources and availability; and concerns about higher user rates or fees associated with infrastructure loans.

The BRCC and subcommittee members solicited proposals for funding consideration and received the following:

**City of Jasper Wastewater Treatment Facility.** The existing wastewater treatment facility discharges into the Little Buffalo River approximately six miles upstream from its confluence with the Buffalo River. The current facility has an inefficient sludge handling process that backs up in the treatment units. Necessary improvements to the wastewater treatment facility include a new sludge processing facility that would house a sludge press and associated chemical feed equipment, site pump station improvements, new flow equalization basin, and general site plumbing rehabilitation.

The BRCC approved providing \$250,000 in funding assistance to the City of Jasper for improvements to the City's wastewater treatment facility. Funding provided by the BRCC is intended to work in conjunction with the application that was submitted by the City of Jasper to the Arkansas Department of Agriculture's Natural Resources Commission which approved a \$440,000 loan and a \$1,351,750 loan with principal forgiveness from the Arkansas Clean Water State Revolving Loan Fund on July 15, 2020.

**Septic Tank Remediation Pilot Program.** Many people within the Buffalo River Watershed live in areas which are not served by municipal sewers and wastewater treatment is accomplished using septic systems. Considering that some regional soils are generally rocky and thin, conventional septic systems consisting of a septic tank and drain field are occasionally ineffective and can degrade water quality. In addition, when not maintained, even a functioning septic system can eventually fail and leach contaminants into the ground and directly into water sources. This pilot program will focus on providing resources and information to existing homeowners for replacement of old, failing septic systems, and promote proper maintenance of existing systems through a grant/loan program. Funding for the Septic Tank Remediation Pilot Program within the Buffalo River Watershed will be covered by the Arkansas Department of Agriculture's Natural Resource Division through the Clean Water State Revolving Loan Fund.

**Marble Falls Sewer Improvement District No. 1.** The wastewater treatment plant is not operating well due to it being sized for a time when there was a larger community and a fully functioning amusement park at Dogpatch. The outfall for this facility discharges into a creek that eventually leads to the Buffalo River. Discussions regarding providing funding assistance for the repair and upgrade of Marble Falls Sewer Improvement District No. 1's wastewater treatment facility and system were tabled due to a recent acquisition and the need to consider possible future uses.

In addition, the City of Marshall in Searcy County had previously received funding on March 15, 2015, in the amount of \$2,000,000 from the Arkansas Drinking Water State Revolving Loan Fund in order to rehabilitate the City's water mains and reduce water loss in their water distribution system. On May 20, 2020, the Arkansas Department of Agriculture's Natural Resources Commission approved additional funding in the amount of \$95,075, for a total funding amount of \$2,095,675 to be awarded as a loan with principal forgiveness.

## **Cost Share Programs For Agriculture**

On September 4, 2019, Governor Hutchinson and U.S. Secretary of Agriculture Sonny Perdue signed a Memorandum of Understanding for Shared Stewardship that established a framework for participating agencies to work more closely together to accomplish mutual goals, further common interests, and effectively respond to ecological challenges and natural resource concerns in Arkansas. The state agencies participating in the agreement are the Arkansas Department of Agriculture's Forestry Division and the Arkansas Game and Fish Commission. The federal participating agencies are the USDA's Forest Service and Natural Resources Conservation Service (NRCS).

**Joint Chiefs' Landscape Restoration Partnership Program.** On February 27, 2020, as a result of the 2019 Shared Stewardship agreement, the U.S. Department of Agriculture (USDA) invested more than \$2.3 million in Arkansas to improve water quality, forest health, and wildlife habitat in the Ozark and Ouachita Highlands through the Joint Chiefs' Landscape Restoration Partnership program. The USDA's Joint Chiefs' Landscape Partnership Program (Joint Chiefs') directs the Forest Service and the NRCS to work together with agricultural producers, forest landowners, and National Forest System lands to improve forest health using available Farm Bill conservation programs and other authorities.

Arkansas's Joint Chiefs' project, titled "Building Resilient Watersheds to Improve Drinking Water Quality in the Ozarks and Ouachita Highlands 2020-2022", includes the Buffalo River Watershed and five additional high priority watersheds covering 5 million acres. Objectives of the project include protection of water quality and supply for public drinking water, tourism, fisheries, and rural industrial development; improvement of forest health and resiliency; reduction of wildfire threats; improvement of wildlife habitat; and environmental education.

The project provides \$2 million to help private landowners install conservation practices such as forest stand improvement (thinning), prescribed burning, firebreaks, tree and shrub planting, and streambank and shoreline protection. All participation by landowners is completely voluntary. The Forest Service and NRCS are working together to replace degraded and undersized stream crossings, construct permanent fire breaks, reduce fuel loads, conduct controlled burns, and conduct outreach to local communities.

The federal funding was leveraged with funding from Arkansas partners including the Arkansas Association of Conservation Districts, the Arkansas Game and Fish Commission, and the Arkansas Forestry Association. Other state partners and supporters providing in-kind services include the Arkansas Department of Agriculture's Forestry Division and Natural Resources Division, the Arkansas Natural Heritage Commission, the Arkansas Game and Fish Commission, and The Nature Conservancy.

The Forestry Division and local Conservation Districts within the watershed have dedicated a significant amount of time towards landowner outreach and education about available cost-share programs under the project and how to access them. A social media campaign by both entities has increased awareness of the programs and their benefits.

In 2020, direct assistance to landowners within the watershed for forestry-related practices included the creation of firebreaks, prescribed burning, and forest stand improvement practices, with a portion of the activities funded through the Joint Chiefs' project. In addition, planning for 8,196 acres of prescribed burning, 195,814 feet of firebreaks, 616 acres of forest stand improvement, and 83 acres of tree/shrub establishment was accomplished and will be funded in part through the Joint Chiefs' project. The Forestry Division will work with NRCS to monitor and track the funded practices.

**Regional Conservation Partnership Program: Buffalo River Watershed Enhancement Project.** In addition to the Joint Chiefs' project, funding from private donors to assist with the BRCC efforts are being directed to a USDA NRCS Regional Conservation Partnership Program (RCPP). In April 2020, the USDA NRCS announced the approval of the RCPP proposal for a Buffalo River Watershed Enhancement Project. The project received more than \$5.4 million in total funding, with USDA NRCS providing almost \$2.7 million, and local partners contributing more than \$2.76 million.

Over a five-year period, funding will be provided to landowners in portions of the Buffalo River Watershed for Searcy County conservation projects. The eligible areas within Searcy County include Calf Creek, Bear Creek, Lower Big Creek, Tomahawk Creek, and Brush Creek. The funding will be used for projects that aim to improve water quality by reducing sediment and nutrient loads through improving pasture management, reducing erosion from unpaved roads, and restoring riparian corridors.

Partners for the Buffalo River Watershed Enhancement project include the following:

- The Nature Conservancy
- Arkansas Department of Agriculture, Forestry Division
- Arkansas Department of Agriculture, Natural Resources Division
- Arkansas Game and Fish Commission
- University of Arkansas, Center for Training Transportation Professionals
- University of Arkansas Division of Agriculture Cooperative Extension Service
- Buffalo River Foundation
- Buffalo Conservation District
- USDA Natural Resources Conservation Service

The partners have been working with the USDA NRCS to develop the project agreement and expect to have the agreement finalized in early 2021. The partnership has also worked with the Searcy County Agriculture Cooperative, a locally-led group of farmers, landowners, and business leaders, to plan outreach strategies and gather input on needed conservation practices that will support farmers and landowners while also enhancing water quality in the Buffalo River. One of the first identified projects is a private land unpaved road demonstration project in Searcy County that is expected to be completed in early 2021.

## **Tourism and Tourism Impacts**

There is no question that the large number of visitors to the Buffalo National River each year has an impact on the watershed, through direct and sometimes irresponsible use of the Buffalo River and its tributaries. Additionally, the heavy use of roads, trails, and other infrastructure by visitors to the watershed causes deterioration, leading to high maintenance costs for counties and cities. Litter is frequently mentioned as a problem.



BRCC members, subcommittee members, and stakeholders within the watershed have participated both in subcommittee meetings and as a Tourism Work Group to discuss areas of concern and collaborative opportunities specific to the tourism industry. For example, the work group supported unpaved road projects seeking funding because of the close nexus with and benefit for tourism. The funding for unpaved road sites will have a significant positive impact on the tourism industry. For example, Hawksbill Crag on Cave Mountain Road in Newton County is a very popular tourist destination generating thousands of visitors to a remote location served by inadequate infrastructure. Improvements supported by BRCC for this road that serves one of the most photographed locations in Arkansas will help greatly. Likewise, Tourism Work Group participants including the U.S. Forest Service and National Park Service will play a key role in making these improvements happen.

In discussions regarding needs and opportunities in the watershed, the Tourism Work Group identified evaluation of the feasibility of a day-use permit as an important step to better understand visitation numbers and impacts, to enforce some accountability, and to potentially allow for better management of activities within the watershed. The Tourism Work Group, particularly stakeholders within the watershed, expressed a belief that the potential benefits would be worth the work of evaluating alternatives. Mark Foust, National Parks Service superintendent of the Buffalo National River, provided the group with updates on his park's efforts to begin this evaluation and has indicated they are in the process of initiating the study of day use permit options. The Tourism Work Group has affirmed their commitment to work closely with the park to engage as stakeholders and partners in order to advance this process.

## **MOVING FORWARD**

BRCC members and subcommittee members will continue to work with partners in order to maximize the use of state and federal funding on projects within the Buffalo River Watershed.

BRCC members and subcommittee members will continue to meet as needed on the four topic areas of: unpaved roads; cost-share programs for agriculture; water and wastewater system infrastructure; and tourism and tourism impacts.

The BRCC members and subcommittee members will convene as a whole at least once per quarter and submit an annual report that is intended to document the important work being accomplished within the watershed as well as identify areas where additional partnerships and funding can create lasting impacts.

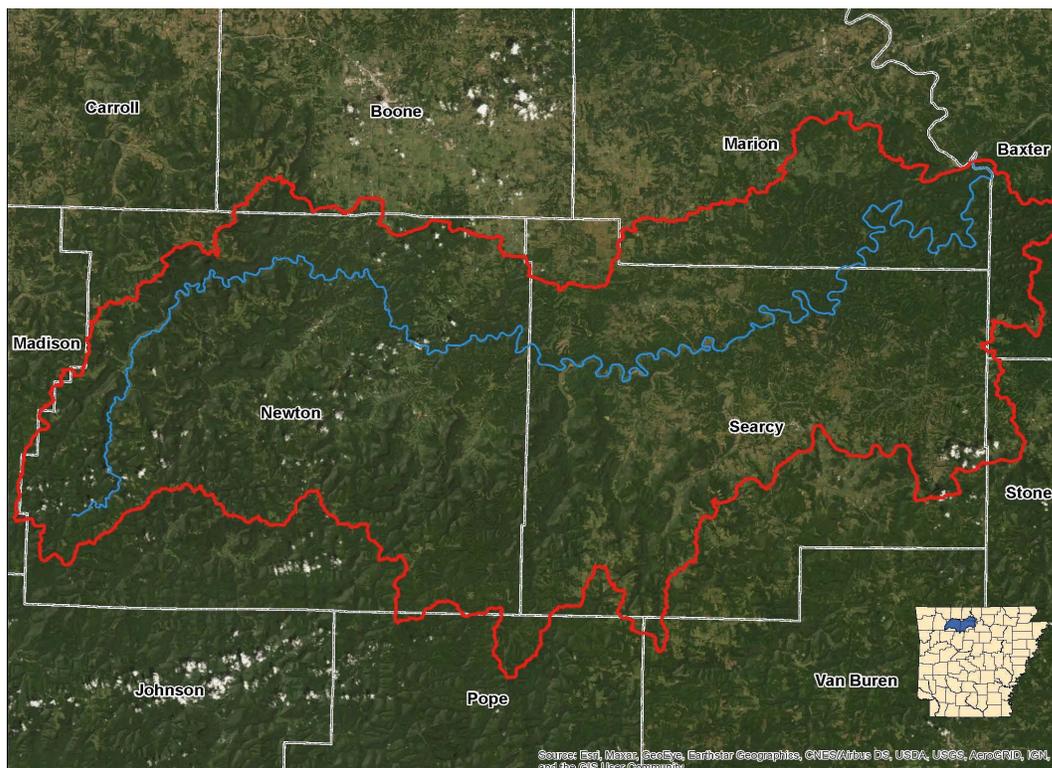
## APPENDIX A - TIMELINE OF EFFORTS

- November 15, 2019** Following approval by the Arkansas Legislative Council, a total of \$2 million was available for the BRCC efforts. \$1 million from the Governor’s discretionary fund, and \$1 million from private donors.
- December 12, 2019** A 17-member subcommittee was established that is comprised of local landowners, local city and county government officials, and stakeholders in the areas of agriculture, conservation, and tourism.
- January 23, 2020** The first meeting of the BRCC members and subcommittee members scheduled to take place in Marshall, Arkansas was cancelled due to inclement weather.
- February 13, 2020** BRCC members and subcommittee members convened in Marshall, Arkansas for the first meeting. During this meeting the discussion centered around four main topic areas that will be the focus for future BRCC action and funding proposals. These four topic areas include: unpaved roads; cost-share programs for agriculture; water and wastewater system infrastructure; and tourism and tourism impacts.
- March 11, 2020** The first coronavirus case in Arkansas prompted the cancellation of scheduled subcommittee meetings on March 19, 2020 and April 2, 2020.
- April 29, 2020** BRCC members and subcommittee members convened by conference call to get an update on the work of the four subcommittees and discuss efforts to move forward.
- June 2, 2020** BRCC members and subcommittee members convened to review proposals submitted for funding as well as receive updates from the four topic areas. Requests for funding included four unpaved roads sites as well as three water and wastewater proposals. During the meeting the four unpaved roads sites and funding of \$250,000 to the City of Jasper for wastewater treatment facility improvements received recommendations for funding.
- June 9, 2020** Presentation to the House and Senate Public Health, Welfare and Labor Committee. The presentation included an update on the BRCC efforts and the current status of funding requests. Secretary Ward stated that the BRCC members and subcommittee members would continue to refine the funding proposals that were received and will work with partners in order to maximize the use of state funding on projects within the Buffalo River Watershed.
- July 2, 2020** The BRCC Tourism Work Group met to discuss tourism in the Buffalo River Watershed and to consider potential collaborative/engagement opportunities. Participants identified a strong interest in better understanding the feasibility of a process for developing a day-use permit system. The Tourism Work Group committed to work with the National Park Services as a partner in the park’s efforts to conduct appropriate studies to better understand this issue and recommend policies.

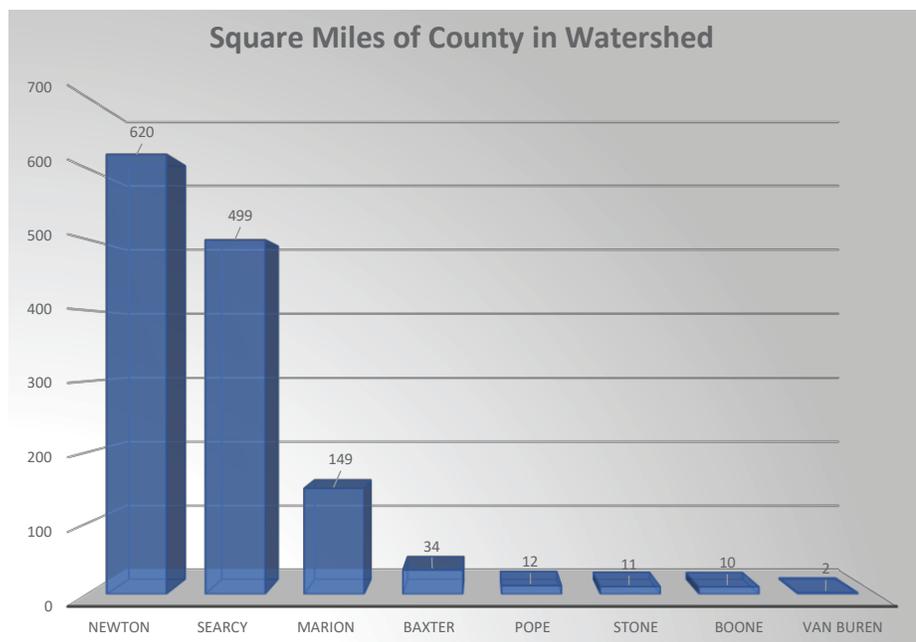
- August 6, 2020** BRCC members and subcommittee members convened to review updated proposals submitted for funding and received updates from the four topic areas.
- BRCC members and subcommittee members decided to table discussions regarding funding for Marble Falls and Feral Hogs until additional information was provided. The BRCC approved the following updated requests for funding:
- (1) maintaining the funding amount of \$250,000 to the City of Jasper for wastewater treatment facility improvements;
- (2) revising funding requests for Unpaved Roads to reflect \$231,935 for Cane Branch Road in Searcy County and \$397,400 for Cave Mountain Road (to Hawksbill Crag) in Newton County. The total funding for Unpaved Roads equates to a \$570,979 once contingency costs are added and funding from the federal nonpoint source management program are subtracted.
- August 20, 2020** Presentation to the House and Senate Public Health, Welfare and Labor Committee. The presentation included an update on the BRCC efforts and the current status of funding requests. The legislative committee approved the funding request of \$250,000 to the City of Jasper and \$570,979 to assist with the Cane Branch Road and Cave Mountain Road unpaved road sites. With the approval of the two projects, funding of \$179,021 remains for distribution by the BRCC.
- November 4, 2020** BRCC members and subcommittee members convened to receive updates from the four topic areas and review a funding proposal. The BRCC approved providing funding to the Town of Gilbert for their Dark-Sky Streetlight Conversion Proposal in the amount of \$11,600.
- November 9, 2020** Consideration of the Town of Gilbert funding proposal was reviewed and approved by the House and Senate Public Health, Welfare and Labor Committee. With the approval of this project, funding of \$167,421 remains for distribution by the BRCC.
- November 9, 2020** Joint press release from the BRCC members distributed seeking applications for projects that need assistance through the remaining \$167,421 in funding available through the BRCC. Applications were accepted through December 15, 2020.
- December 15, 2020** Applications seeking assistance were received for five eligible projects. Funding proposals included requests for assistance with feral hog eradication, tree planting in Searcy County, the purchase and renovation of an historic building in Jasper for public use, and two Buffalo River algae bloom studies. Applications will be reviewed and discussed by the BRCC and subcommittee members at the next quarterly meeting.

# APPENDIX B - UNPAVED ROADS IN THE BUFFALO RIVER WATERSHED REPORT

## Geography of the Buffalo River Watershed

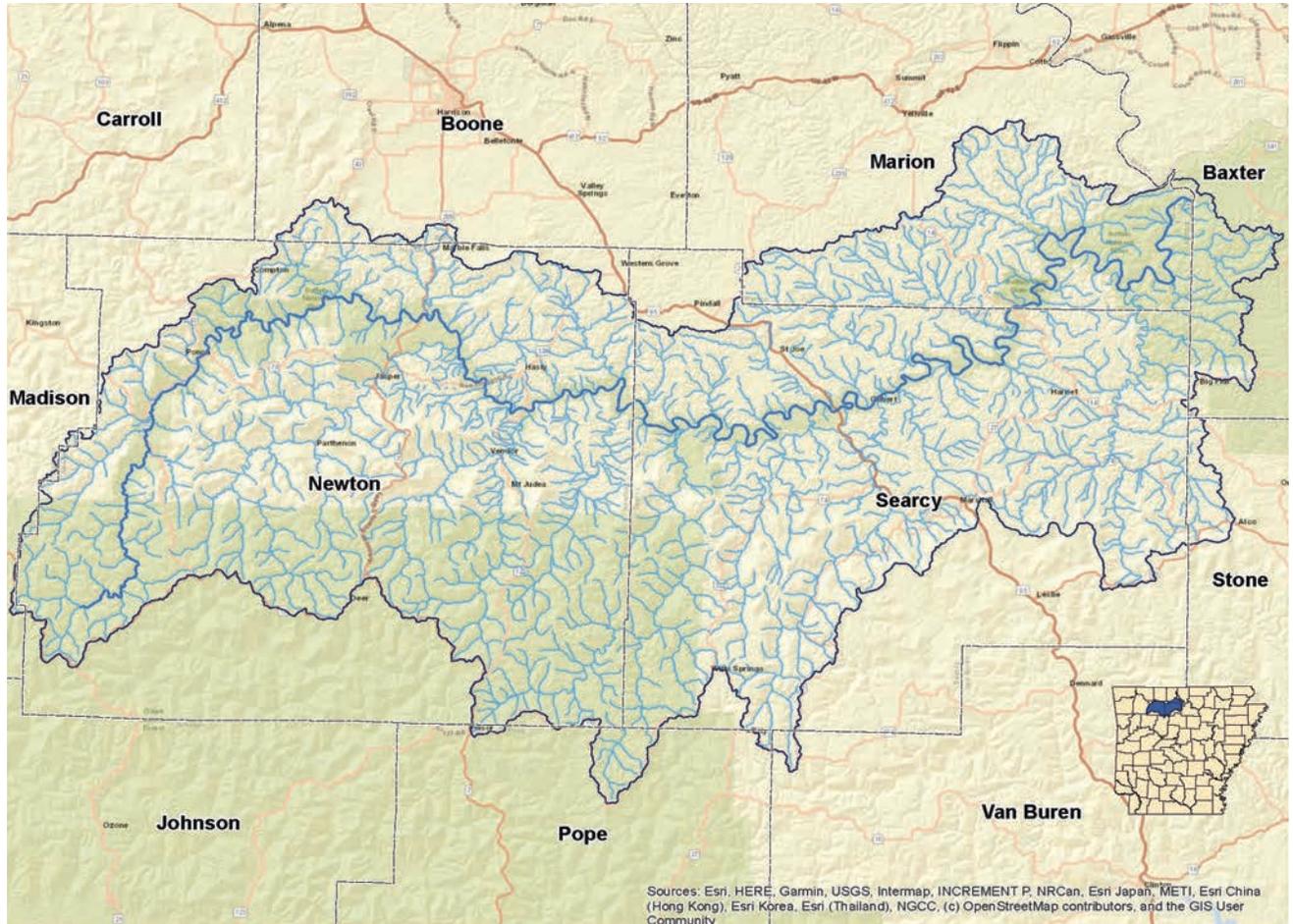


The Buffalo River watershed begins along the western border of Newton County. The river flows easterly to meet the White River. The watershed drains roughly 1,330 square miles of the Boston Mountains and Ozark Highlands. It covers parts of eight counties. The terrain is rugged and steep. The majority of the watershed lies in Newton and Searcy counties, with the smallest portion lying in Van Buren County.

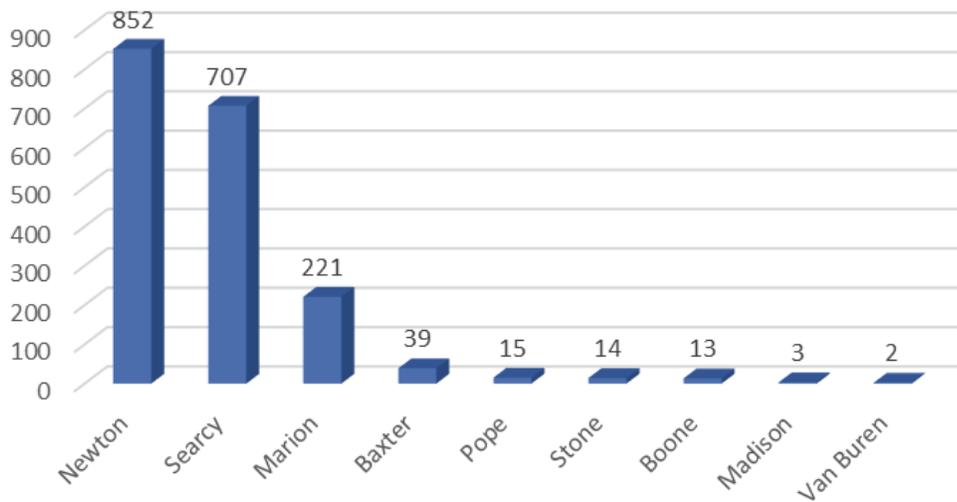


# Tributary Streams that Make Up the Buffalo River Watershed

The Buffalo River has around 1,866 miles of tributary streams which flow into it from around the watershed. Of that 1,866 miles, Newton county contains 852, Searcy county 707, and Marion county 221 miles. Baxter has 39, Pope 15, Stone 14, and Boone 13. Very small portions of Van Buren and Madison counties have 2 and 3 miles respectively.

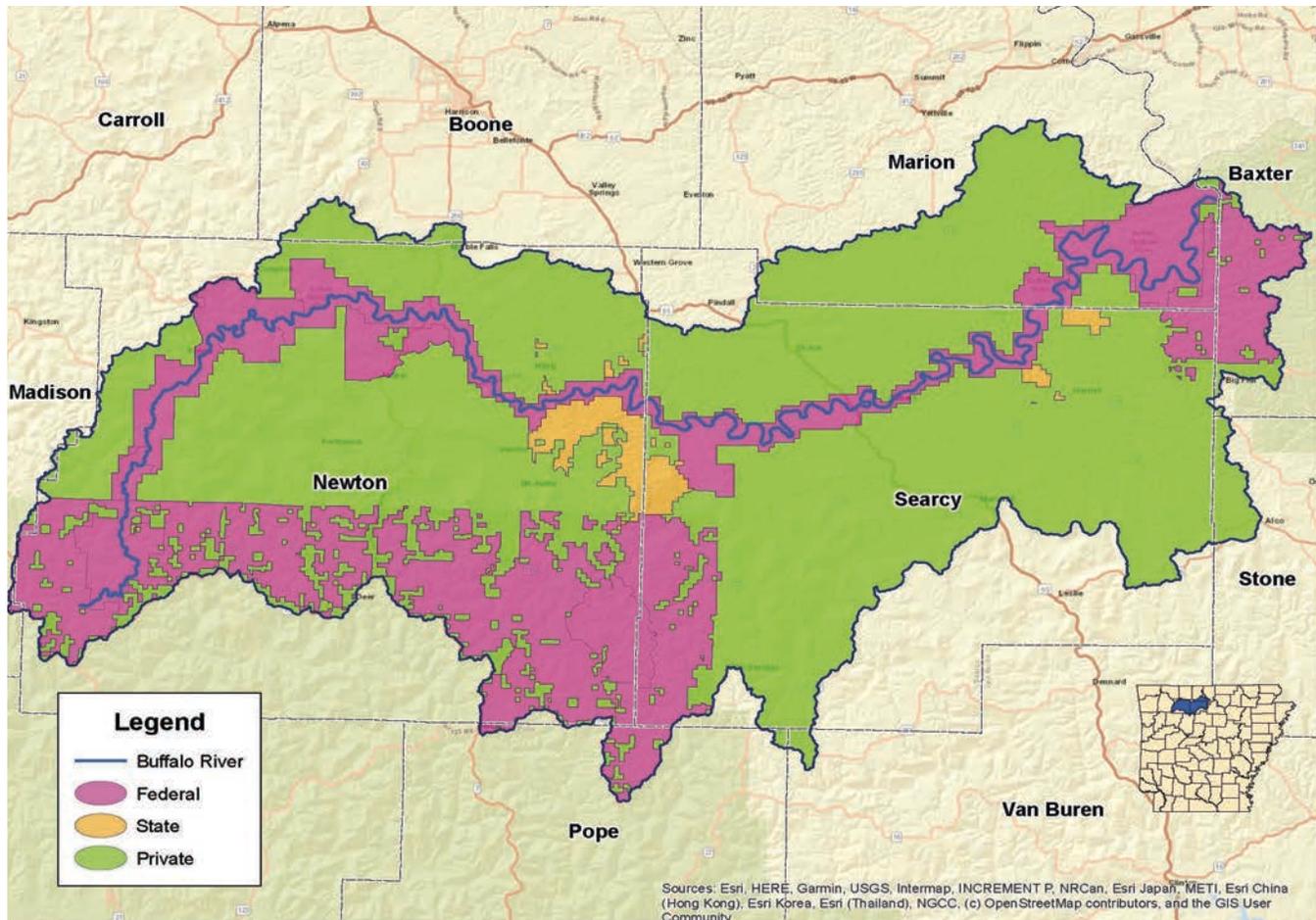


Mileage of Streams by County

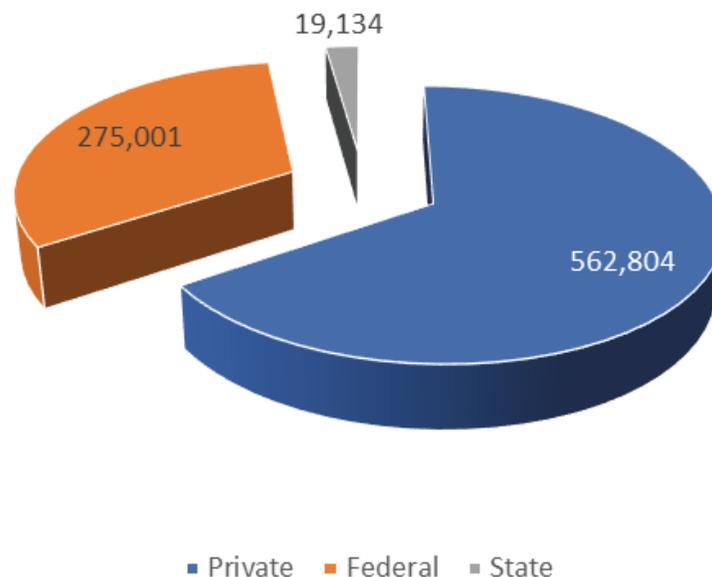


## Ownership of Land in the Watershed

Ownership of land in the water shed is broken up into three categories, private, state, and federal. The majority of the land, approximately 562,804 acres, is owned by private citizens, while the federal government owns roughly 275,001 acres. The Arkansas Game and Fish Commission owns approximately 19,134 acres of land in the watershed.



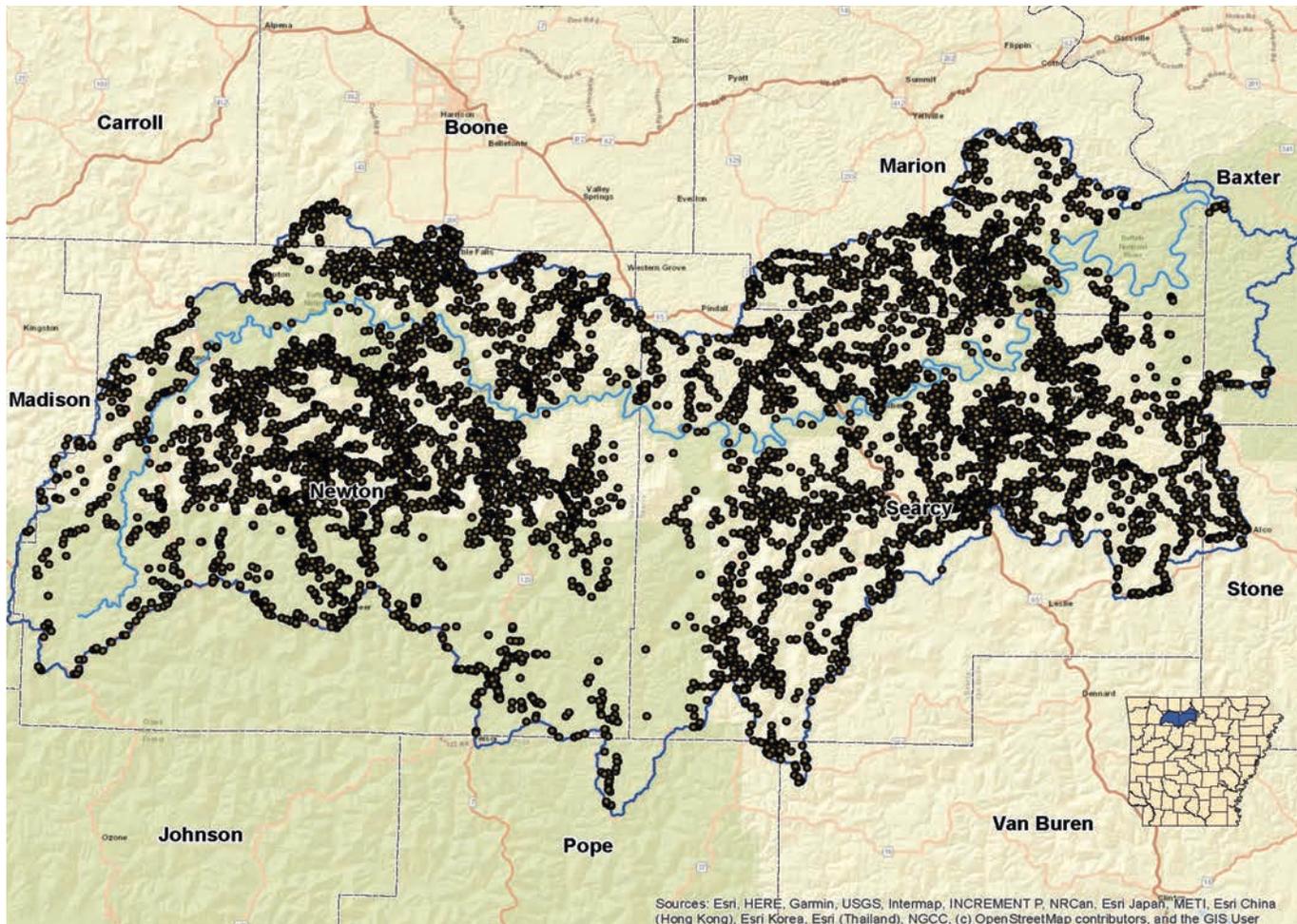
### Acres of Land Owned



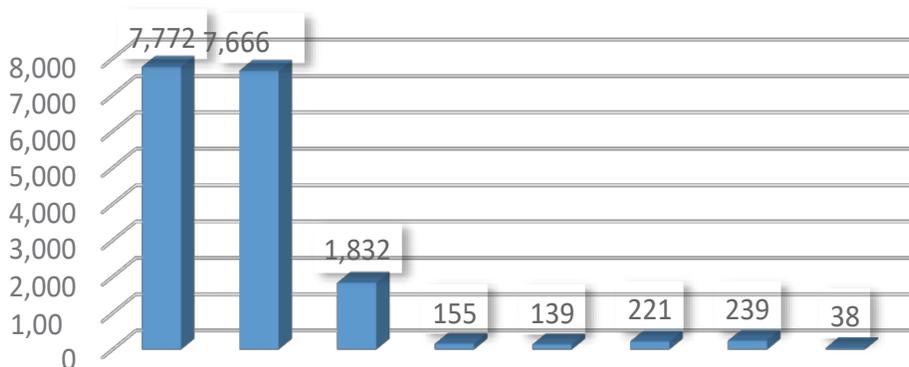
## Distribution of Population in the Watershed

The watershed's estimated population is around 18,000. The majority of population is situated in Newton and Searcy counties.

\* Estimate derived by factoring the number of 9-1-1 addresses by 1.8

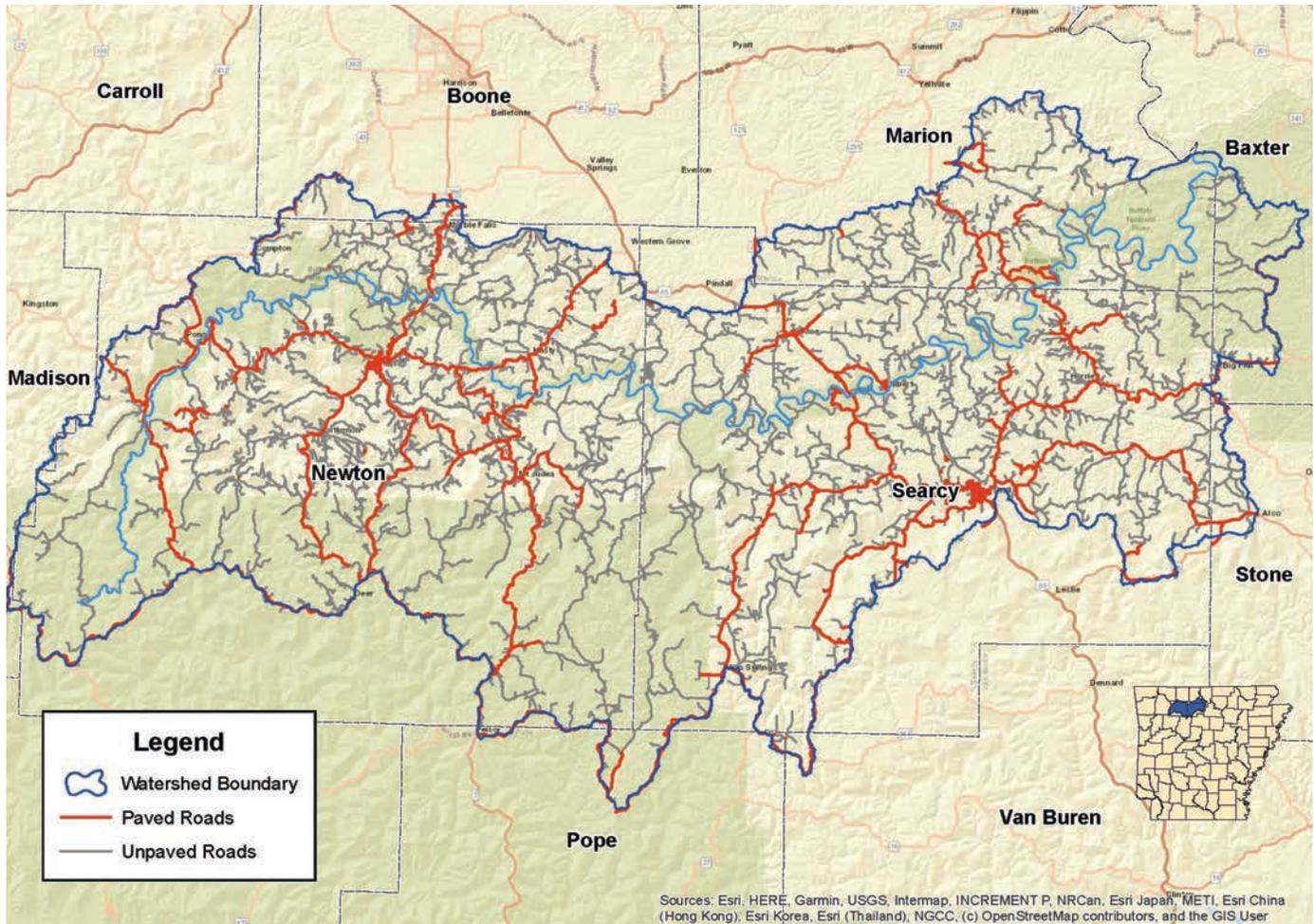


Estimated Population by County in Watershed

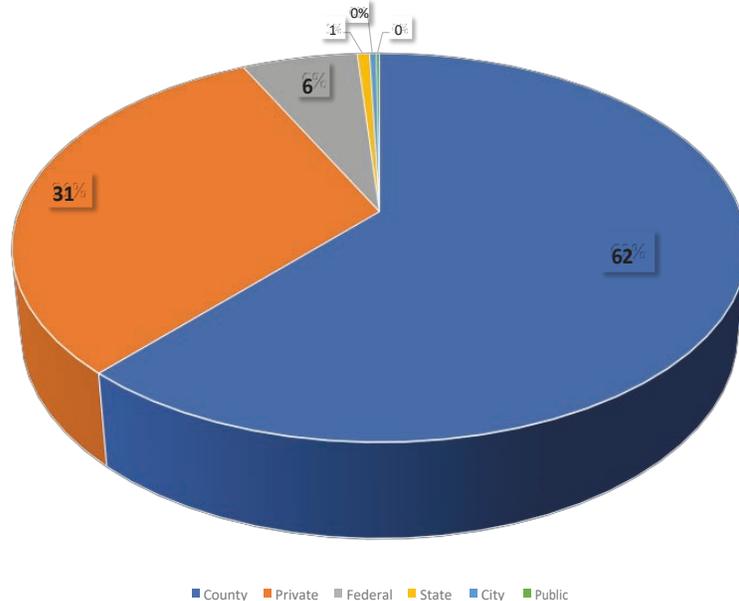


## 2,518 Miles of Roads in the Buffalo River Watershed

Of the 2,518 miles of road in the watershed, 2,007 miles or 80% are unpaved. The pie chart below illustrates that 1,245 miles or 62% of unpaved roads are under county jurisdiction. Of that 1,245, nearly 630 miles or 31% are privately owned. These may be driveways to farms or residences.

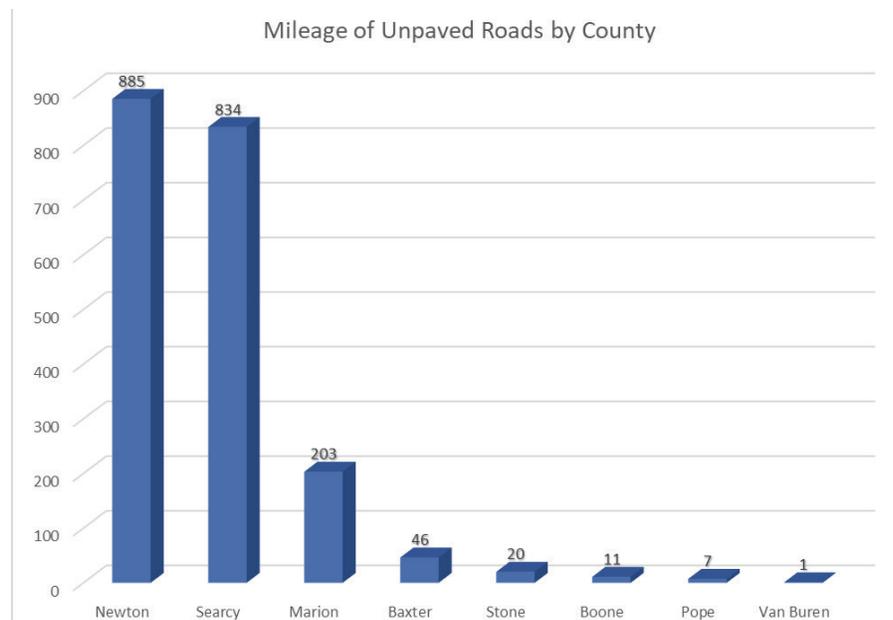
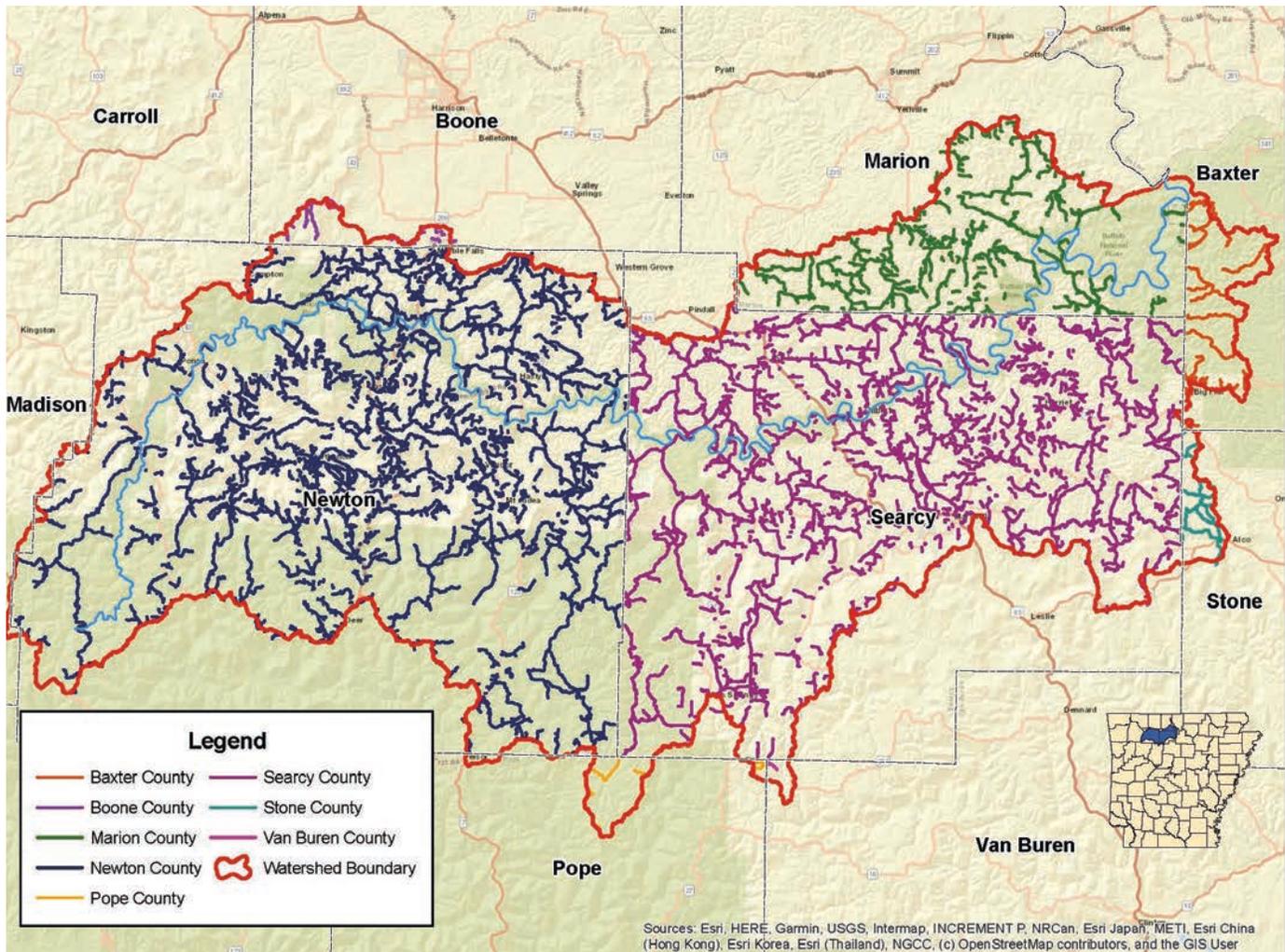


Percentage of Unpaved Miles of Roads by Category



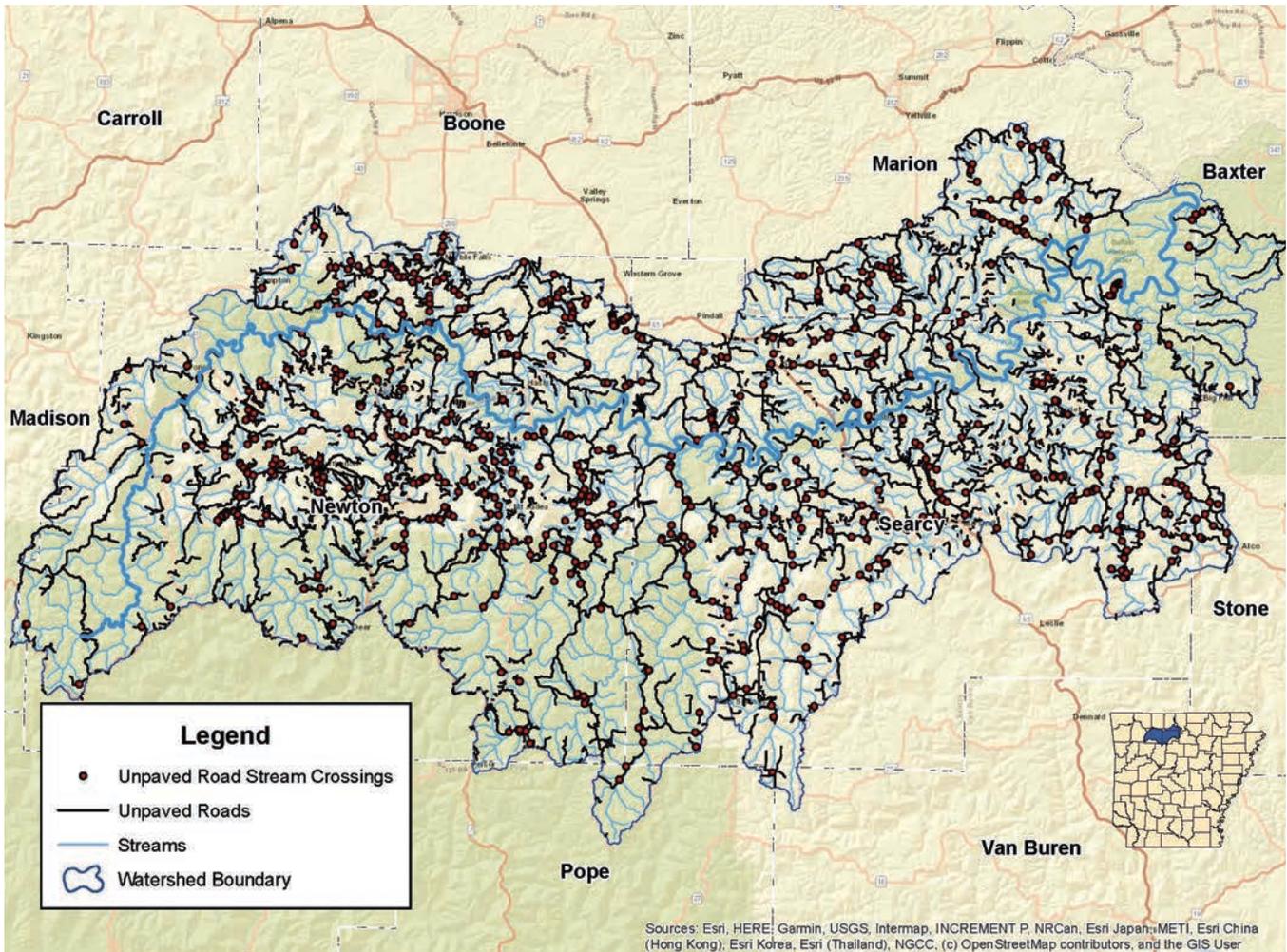
## 80% of Roads in the Watershed Are Unpaved

2,007 of the 2,518 miles of roads are unpaved. The majority of these can be found in Newton (885 miles) and Searcy County (834 miles). Marion, Baxter, and Stone contain 203, 46, and 20 miles respectively; with only 11 in Boone, 7 in Pope, and 1 in Van Buren.

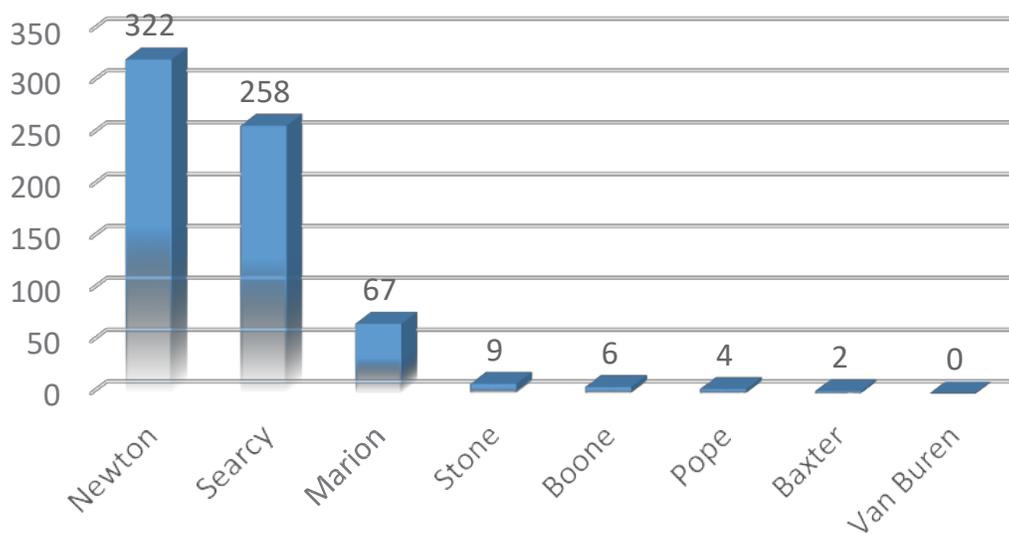


# Unpaved Road Stream Crossings in the Watershed

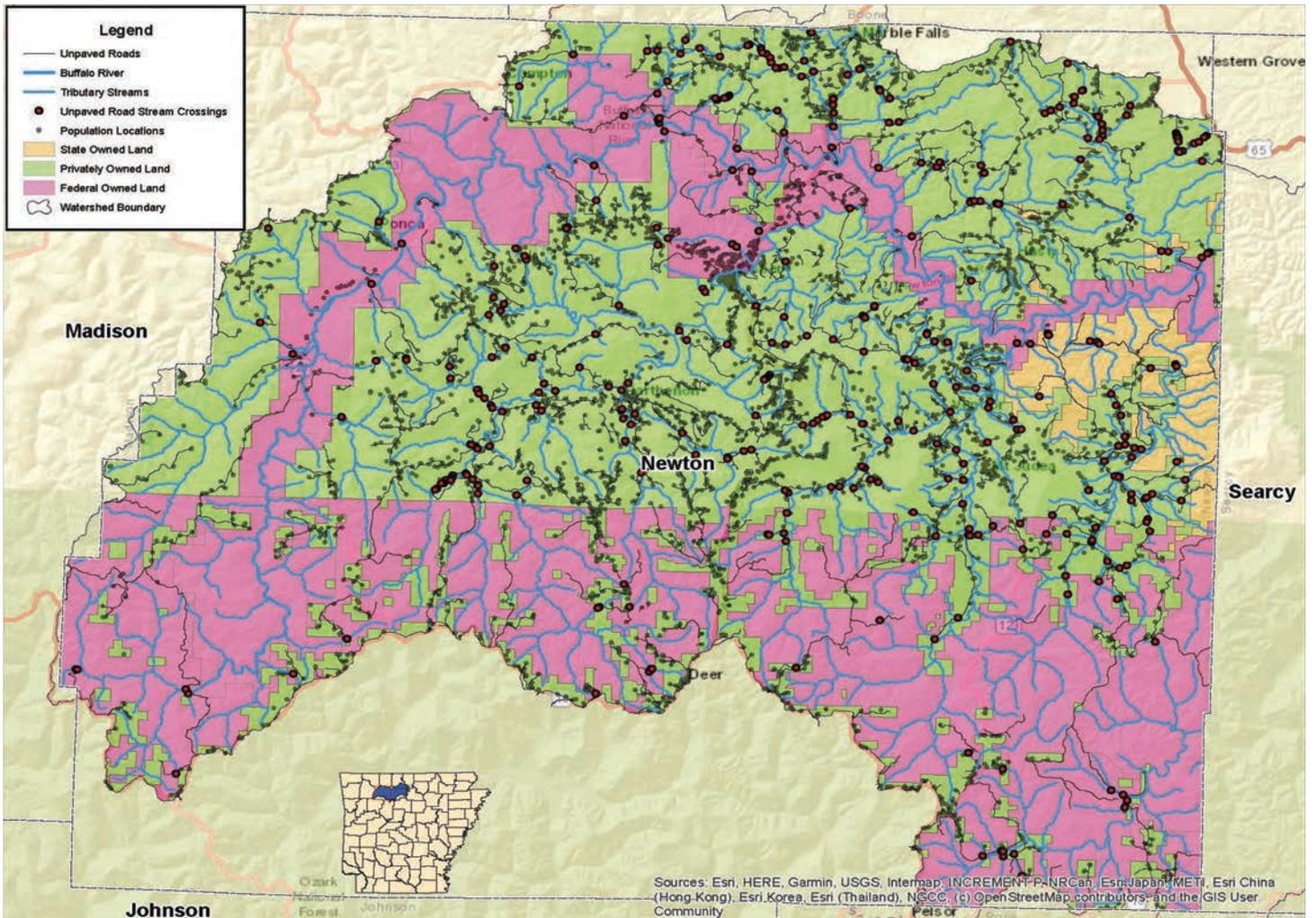
The Buffalo River Watershed contains 668 points where an unpaved road crosses a stream. Of those 668 Newton County has 322, Searcy 258, and Marion 67 stream crossings. Stone County follows with 9, Boone 6, Pope 4, and Baxter 2.



Unpaved Road Stream Crossings



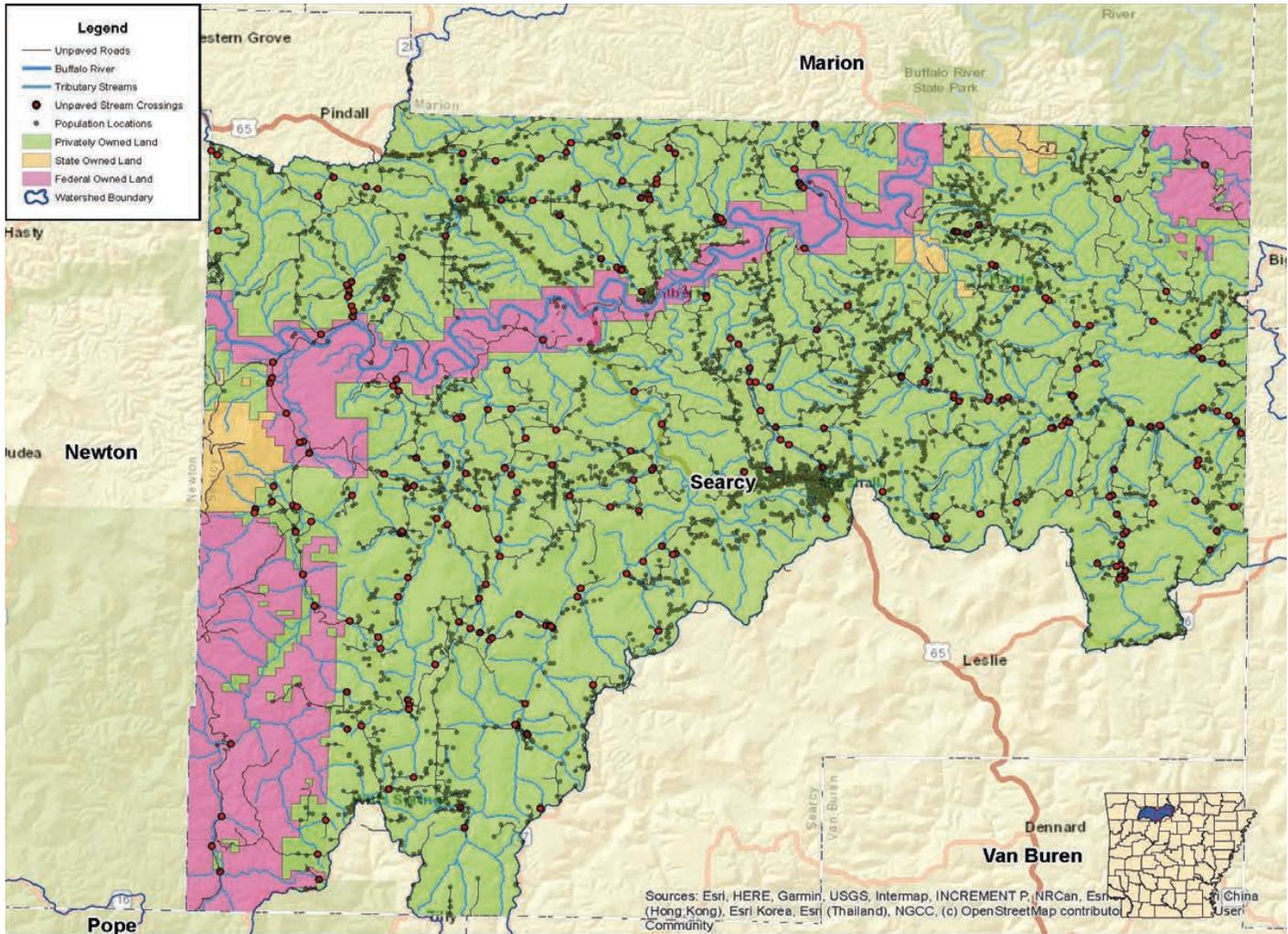
# County Breakdown of the Watershed - Newton County



The table below is a breakdown of the items on the map

Category	Total
Unpaved Roads (Miles):	885
Tributary Stream (Miles):	852
Unpaved Roads Stream Crossings:	332
Population:	7,772
State Owned Land (Acres):	12,606
Privately Owned Land (Acres):	215,800
Federal Owned Land (Acres):	168,076

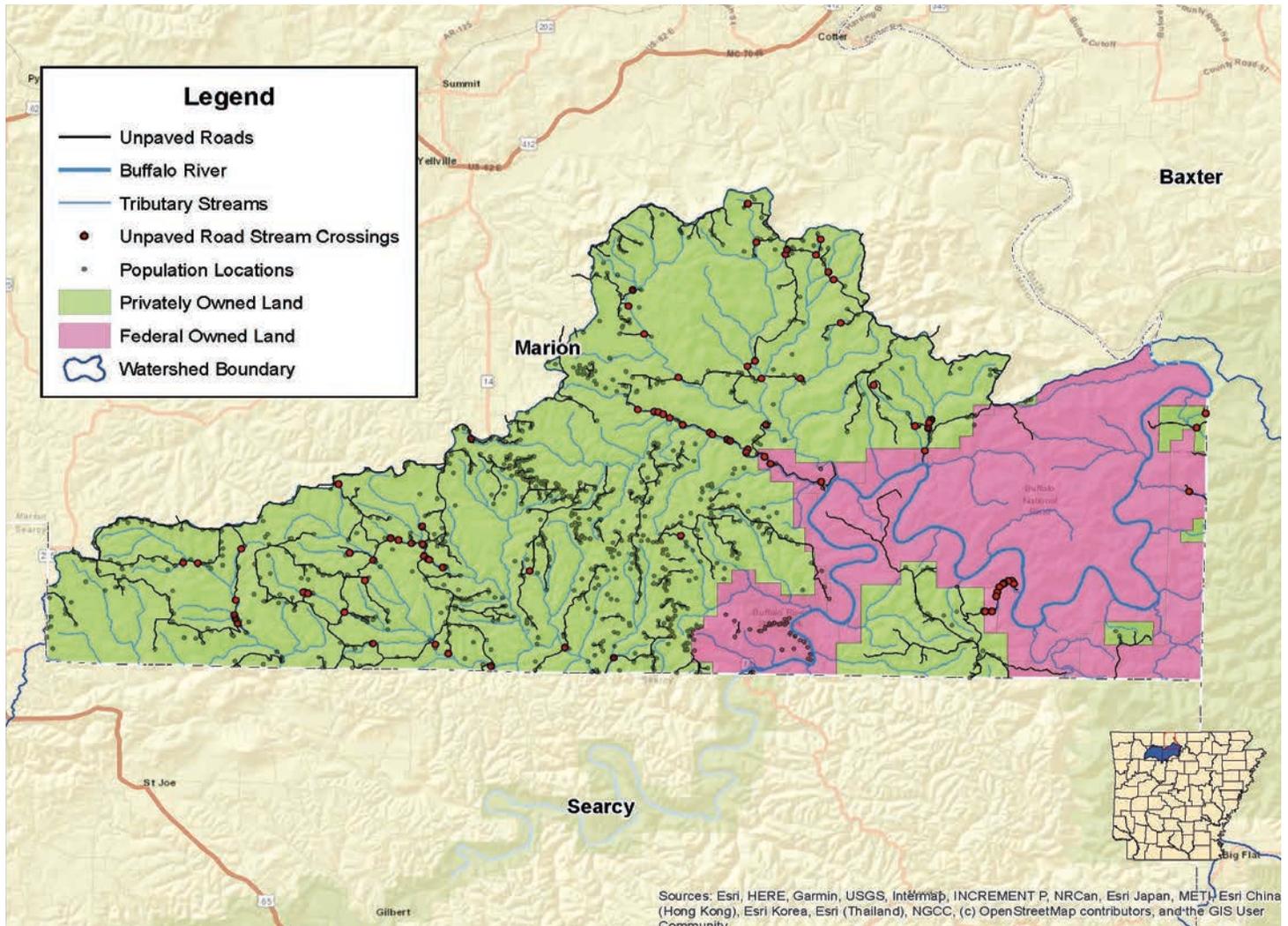
# County Breakdown of the Watershed - Searcy County



The table below is a breakdown of the items on the map

Category	Total
Unpaved Roads (Miles):	834
Tributary Stream (Miles):	707
Unpaved Roads Stream Crossings:	258
Population:	7,666
State Owned Land (Acres):	6,528
Privately Owned Land (Acres):	258,509
Federal Owned Land (Acres):	54,366

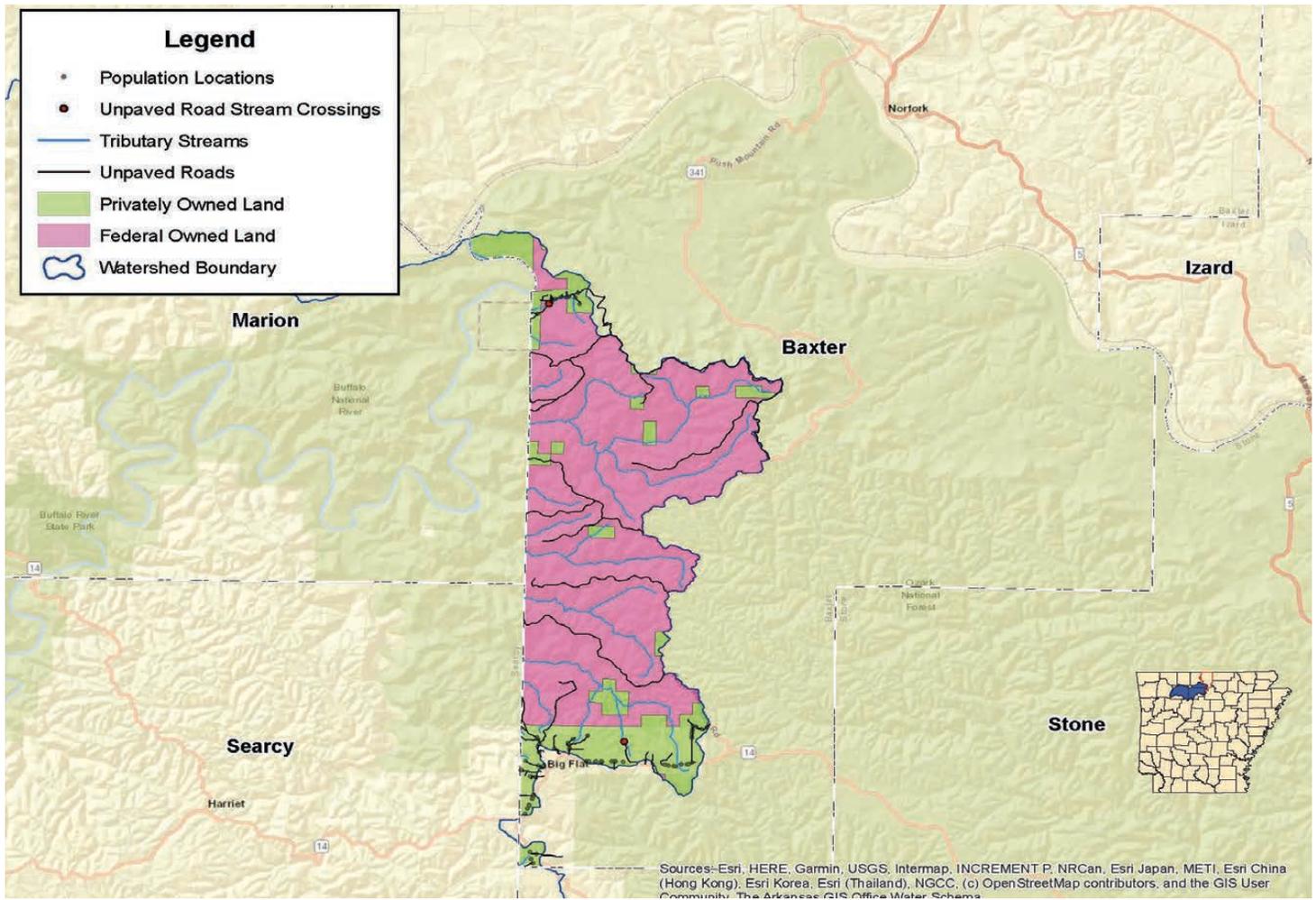
# County Breakdown of the Watershed - Marion County



The table below is a breakdown of the items on the map

Category	Total
Unpaved Roads (Miles):	203
Tributary Stream (Miles):	221
Unpaved Roads Stream Crossings:	67
Population:	1,832
State Owned Land (Acres):	0
Privately Owned Land (Acres):	67,059
Federal Owned Land (Acres):	28,934

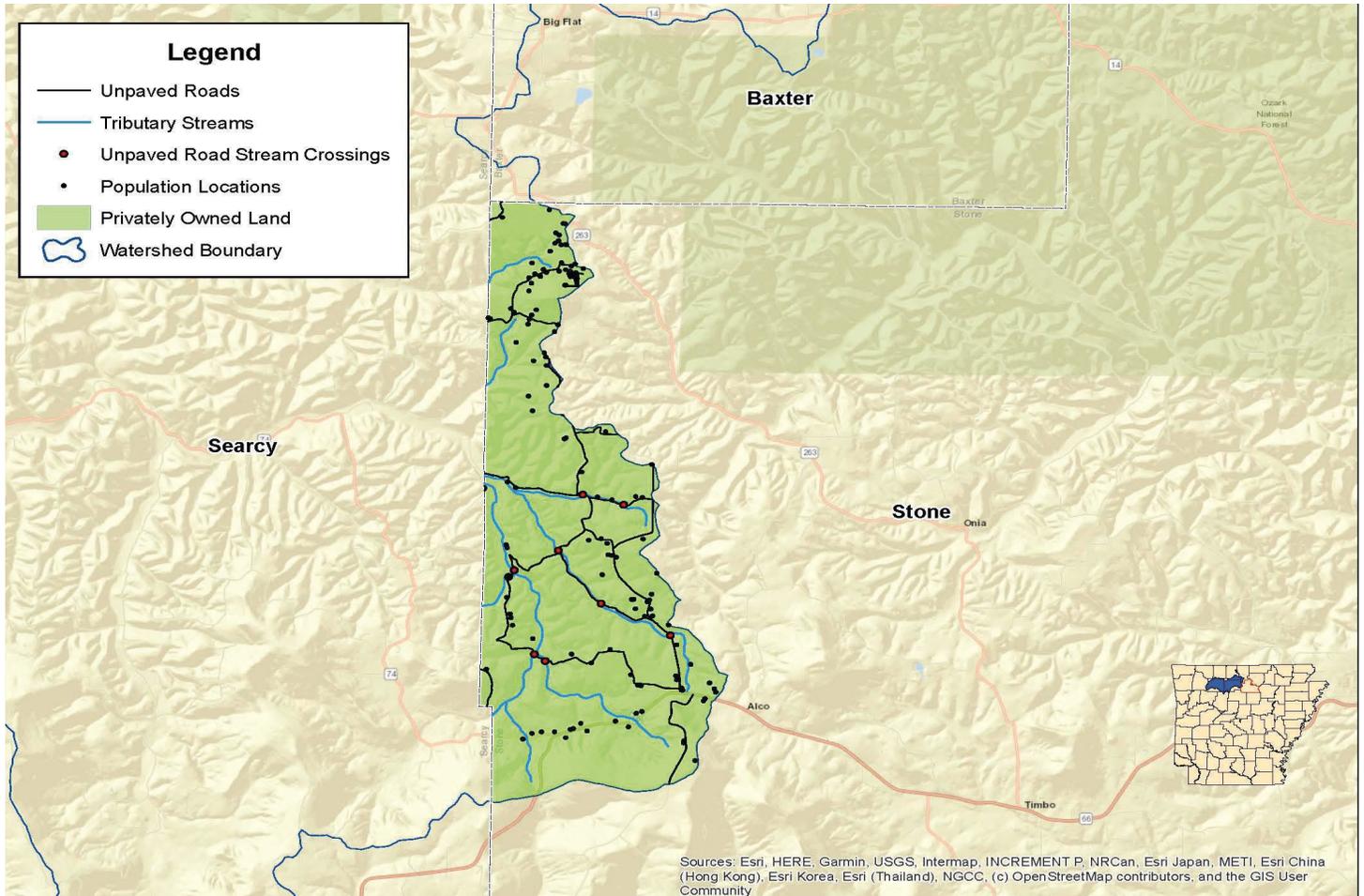
# County Breakdown of the Watershed - Baxter County



The table below is a breakdown of the items on the map

Category	Total
Unpaved Roads (Miles):	46
Tributary Stream (Miles):	39
Unpaved Roads Stream Crossings:	2
Population:	155
State Owned Land (Acres):	0
Privately Owned Land (Acres):	4,051
Federal Owned Land (Acres):	17,021

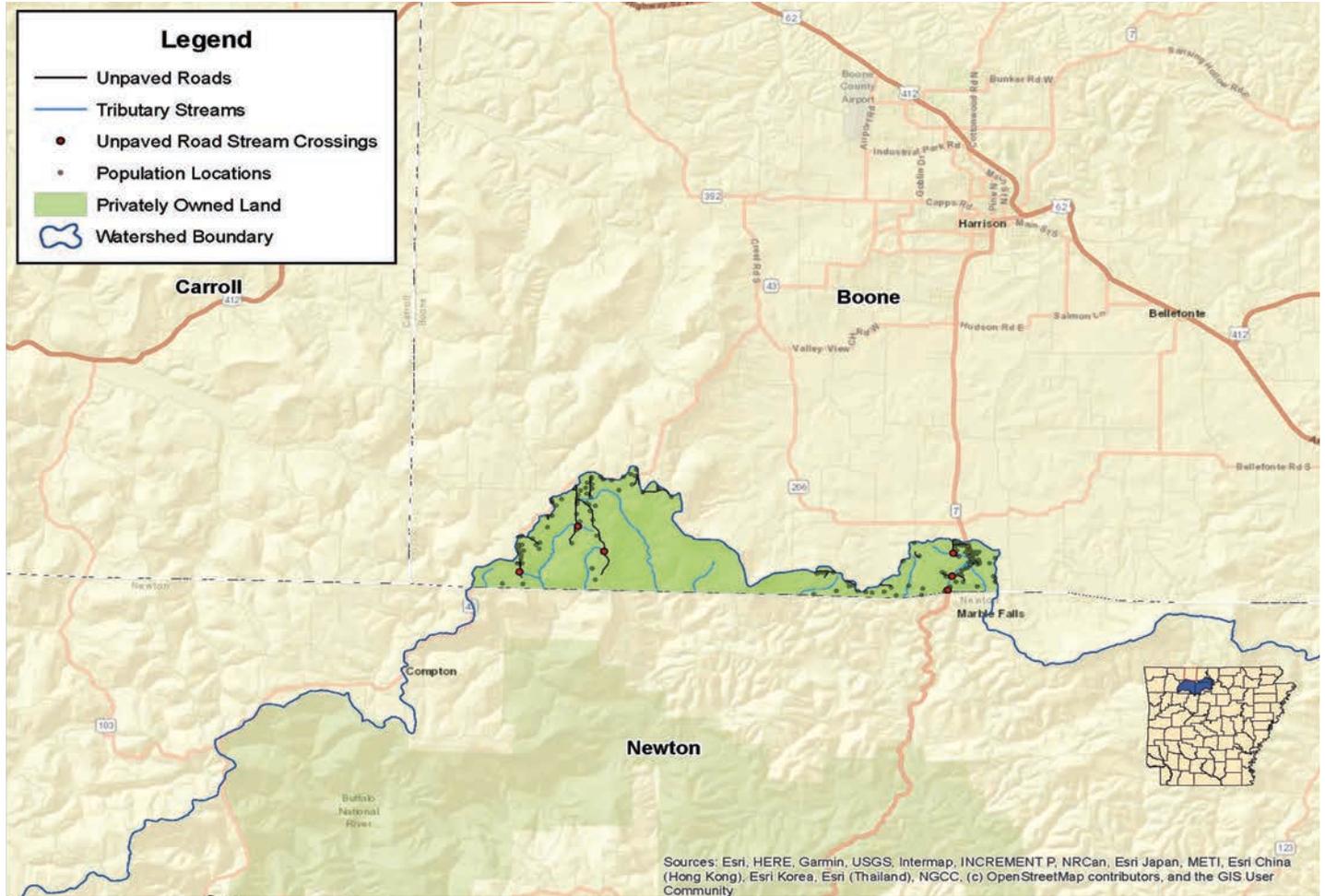
## County Breakdown of the Watershed - Stone County



The table below is a breakdown of the items on the map

Category	Total
Unpaved Roads (Miles):	20
Tributary Stream (Miles):	14
Unpaved Roads Stream Crossings:	9
Population:	221
State Owned Land (Acres):	0
Privately Owned Land (Acres):	6,799
Federal Owned Land (Acres):	0

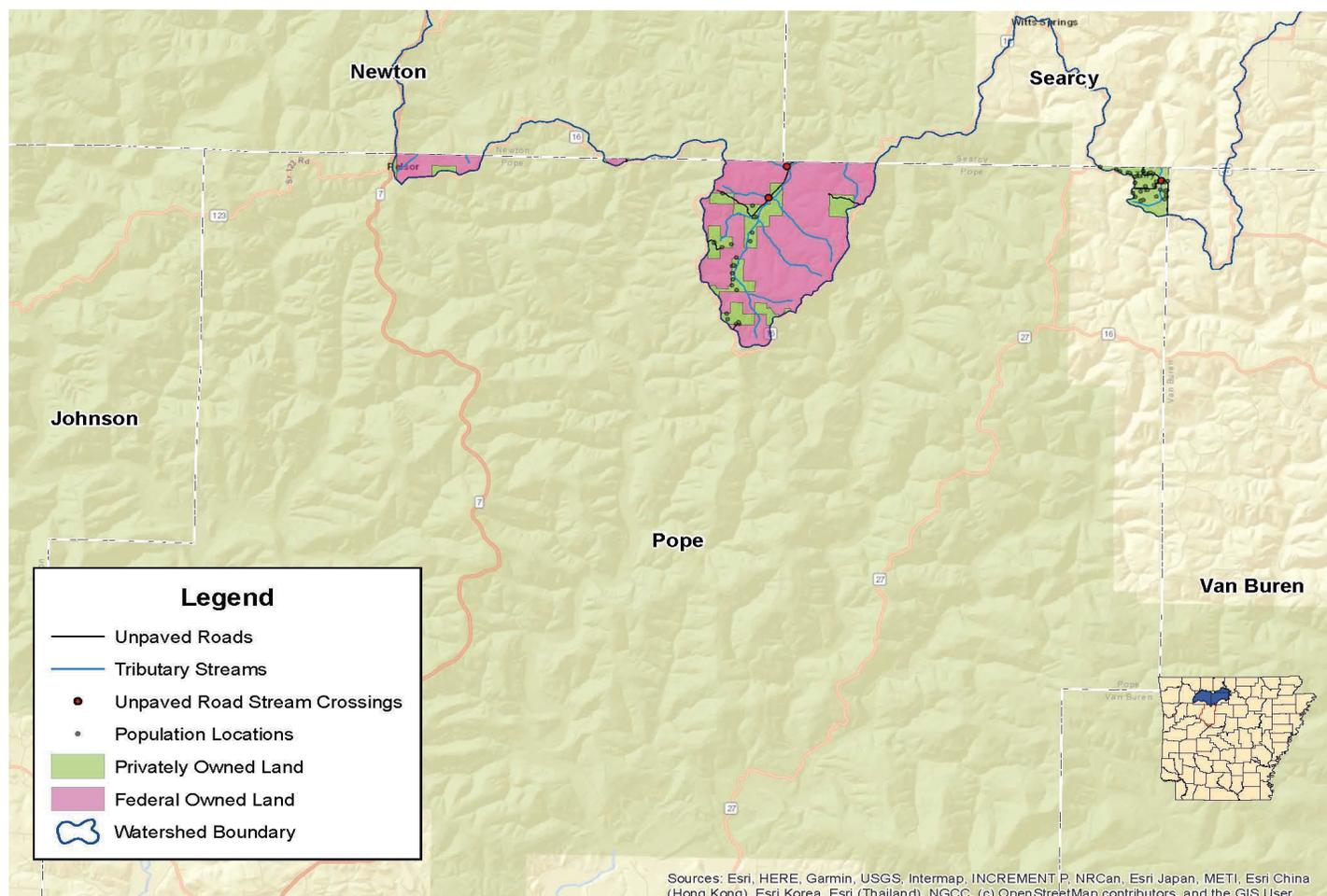
# County Breakdown of the Watershed - Boone County



The table below is a breakdown of the items on the map

Category	Total
Unpaved Roads (Miles):	11
Tributary Stream (Miles):	13
Unpaved Roads Stream Crossings:	6
Population:	239
State Owned Land (Acres):	0
Privately Owned Land (Acres):	6,559
Federal Owned Land (Acres):	0

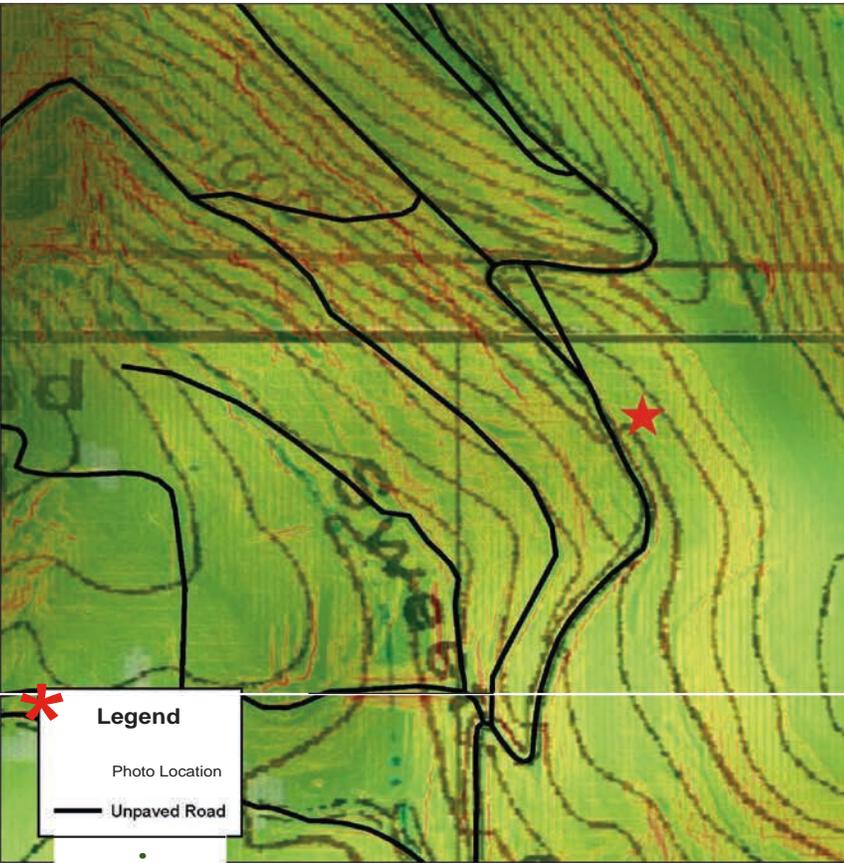
## County Breakdown of the Watershed - Pope County



The table below is a breakdown of the items on the map

Category	Total
Unpaved Roads (Miles):	7
Tributary Stream (Miles):	15
Unpaved Roads Stream Crossings:	4
Population:	139
State Owned Land (Acres):	0
Privately Owned Land (Acres):	1,786
Federal Owned Land (Acres):	5,866

# Topography of an Unpaved Road in Northwest Searcy County



## APPENDIX C - FEDERAL PARTNER UPDATES

### **2020 Update on National Forest Service Activities within the Buffalo River Watershed**

The Forest Service manages public lands in the headwater's area of the King's River and Buffalo River watershed intermixed with private ownership and adjacent to the Buffalo National River in Newton and Madison Counties.

The Robert's Gap Environmental Assessment includes management activities in the watershed and is currently going into the objection period (45-day review) of the Final Environmental Assessment. The project focuses on improving long term sustainability of forest conditions, water quality, and recreational opportunities. The project includes trail additions and relocation for hiking and mountain biking, addresses parking issues at Whitaker Point, commercial thinning of pine and hardwoods, regeneration of some hardwoods, wildlife improvement of ponds, food plots, and road maintenance and closure. Prescribed burning is included in the project to increase ground cover diversity and reduce fuel loading. Our analysis of these activities shows no long-term impact on water quality within the Buffalo River watershed.

### **Buffalo National River 2020 Update**

2020 was a challenging year for the world. The pandemic had direct global impact unlike anything seen for many generations. The impacts in the Buffalo River watershed were significant as well and they continue to challenge the communities, employees, and visitors. What follows is a brief summary of some of the work completed and underway at Buffalo National River, specific to the 4 major elements of the Buffalo River Conservation Committee. It continues to be a pleasure for the National Park Service (NPS) at Buffalo National River to work alongside the BRCC and the many dedicated committee members and communities working toward protecting the watershed.

### **Water Quality and Septic Systems**

Buffalo National River has a long history of collecting water quality samples dating back to the 1980's. In 2020, Buffalo National River scientists collected over one-thousand water samples throughout the park including tributary and main stem sites to analyze potential impacts to water quality, aquatic organisms, and human health. Specifically, the park collected seasonal routine samples at 32 sites, with samples analyzed in partnership with Arkansas Department of Energy and Environment (ADEE) for nutrients. A few examples of targeted projects included:

- River wide quantitative and qualitative surveys of mussel populations in partnership with United States Geologic Survey (USGS), Columbia Environmental Research Center, and Arkansas State University.
- River wide filamentous algae surveys in cooperation with USGS-Little Rock, ADEE, and AGFC.
- Upstream/downstream comparison of bacterial and nutrients at river accesses with campgrounds and septic systems.
- Continued sampling (since 2013) of Big Creek project where we collected five samples per month.

Data are used to assess for 303d listings and observe trends to guide management actions regarding resource protection and visitor safety. The park shares data with Arkansas Department of Health, ADEE, the Ozark Society, and with the NPS Office of Public Health.

In 2019, the park requested assistance from the US Public Health Service to conduct an evaluation of all park septic systems. While it was determined that the septic systems at Kyles Landing and Ozark

campground were not impacting natural resources, the park began the process of replacing them with newer, better systems. The park asked USGS to conduct a geological study, based on a proposed location for the new systems, to identify and assess any potential impacts to water quality. The study and other data collected are guiding the design prior to the permit application process.

## **Unpaved Roads**

Facility Management staff began developing project funding requests with the intent of reducing siltation from unpaved surfaces and improving visitor access. The first group of projects will harden a select group of gravel parking areas that are within proximity of the river or tributaries and that have high visitor use. The second phase of projects incorporates improving water diversion along unpaved roads by replacing and increasing culvert locations during cyclic resurfacing operations. The park is also working closely with Searcy and Newton Counties on the BRCC unpaved road projects identified as directly impacting the Buffalo River.

## **Agriculture**

Buffalo National River has Ag Fields in use over 1500 acres across three counties (Marion, Newton, and Searcy). This use is by local farmers who conduct haying and grazing activities under Special Use Permits (SUP) issued by the NPS. There are currently 29 hay permits and six grazing permits. The park has been working on preparing solicitations for the new SUPs in 2021. The new permit conditions are based on specific best management practices (BMP) for Ag Fields. These BMPs include appropriate setbacks from riparian zones and nutrient management (fertilizer/lime applications) based on recommendations from the University of Arkansas and county extension agents. Hundreds of these acres in agricultural production also have wildlife management enhancement plans associated with them. The park works in partnership with Arkansas Game and Fish Commission to provide winter forage (elk) and diverse habitat for turkey and other ground nesting birds.

## **Tourism**

During the initial stages of the response to the spreading virus, the park worked very closely with neighboring communities, counties, state agencies, and other federal agencies to take immediate action to protect people. As a result, the park was closed for over a month in the spring as the world learned how to manage in the pandemic environment and the park made adjustments to welcome back visitors. In close coordination with those same partners and stakeholders, the park re-opened just after Memorial Day and operations adjusted to provide a safe place for visitors to get into their public lands and enjoy their national river. Once the park re-opened, it did not take long for visitors to resume historic uses. By October, the park had already surpassed the 2019 annual visitation numbers. Park concessioners reported booming canoe/kayak rental business throughout the summer.

The most recent NPS economic impact data available indicates that in 2019, 1.3 million park visitors spent an estimated \$59.2 million in local gateway regions while visiting Buffalo National River. These expenditures supported a total of 857 jobs, \$21.1 million in labor income, \$36.7 million in value added, and \$67.8 million in economic output in local gateway economies surrounding Buffalo National River. By the end of October 2020, year to date park visitation had more than 1.3 million visitors, with November and December yet to be recorded.

A significant park access project in motion is the Buffalo Point Launch realignment construction project. The park has completed the design for an accessible walkway and observation area that will replace the damaged launch access road. This project will reduce infrastructure in the frequent flood area and increase recreational experiences for a larger variety of visitors.

## **Summary**

In the closing months of 2020, the park received approval to begin the preliminary planning process for a comprehensive river management plan. This plan will be created to address the ever-growing visitation on the river, access management, infrastructure requirements (e.g. parking and restrooms), and the protection of natural and cultural resources in the park. This plan will require significant amounts of stakeholder input and the BRCC is a natural organization to work alongside the park in the creation of an inclusive plan for the public's park. The plan will be subject to the National Environmental Policy Act and include public input. It will address all facets of the work that BRCC is focused on.

The NPS at Buffalo National River looks forward to future partnership opportunities in the watershed, of which the BRCC plays an important role. The shared mission of working with communities, residents, and stakeholders in the Buffalo River Watershed make the BRCC and NPS partnership an integral part of protecting the watershed.



# Serving all Arkansans



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**BUFFALO RIVER CONSERVATION COMMITTEE  
2020 ANNUAL REPORT**