



2017

Joint Agency Report to Governor Asa Hutchinson



BEAUTIFUL BUFFALO RIVER ACTION COMMITTEE

MISSION

To protect the Buffalo National River's scenic beauty, high-quality water, unique species and habitat, agricultural value, and exceptional recreational uses through the coordination of resources within the Buffalo River Watershed.

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BEAUTIFUL BUFFALO RIVER ACTION COMMITTEE

2017 Joint Agency Report to
Governor Asa Hutchinson

INTRODUCTION

Governor Asa Hutchinson established the Beautiful Buffalo River Action Committee (BBRAC) in September 2016 to address potential water quality concerns throughout the Buffalo River Watershed and to protect the vitality of the Buffalo National River as a national, state, and local landmark. Governor Hutchinson directed five agencies to develop an Arkansas-led approach to identify and address potential issues of common concern in the Buffalo River Watershed.

The Arkansas Department of Environmental Quality (ADEQ), Arkansas Natural Resources Commission (ANRC), Arkansas Department of Health (ADH), Arkansas Agriculture Department (AAD), and Arkansas Department of Parks and Tourism (ADPT) were directed by Governor Hutchinson to serve on BBRAC, with the directors of ADEQ and ANRC serving as co-chairs. The Arkansas Game and Fish Commission (AGFC) and Arkansas Geographic Information Systems Office (AGISO) joined BBRAC as supporting partners.

Governor Hutchinson directed BBRAC to “establish measurable objectives, set achievable action items, establish durable partnerships, share agency resources, and inform policymakers and the general public of relevant progress.” In addition to these all-encompassing, comprehensive goals, the Governor identified four key priorities on which BBRAC was to focus in its first year. The key priorities included the creation of an open and effective forum for stakeholders to engage with each other, development of a watershed management plan (WMP), identification of early actions and effective projects to jump-start improvements or maintain the vitality of the watershed, and finally, consideration of the current state of scientific investigation in the watershed and prioritization of future research needs.

An annual progress report is due to Governor Hutchinson on January 31, 2018. This document was produced by BBRAC to report on the actions and progress made during the first year.



BUFFALO RIVER OVERVIEW

BACKGROUND & HISTORY OF THE BUFFALO NATIONAL RIVER

The Buffalo River Watershed is located within the Ozark Mountains Physiographic Region of Arkansas, which is characterized by steep mountain ridges and intervening valleys. The watershed (878,080 acres) lies within the White River Basin in Northwest Arkansas, has an area of 1,372 square miles, and is home to about 17,000 Arkansans. The watershed also contains unique natural resources, including the Buffalo National River and the Gene Rush Buffalo River Wildlife Management Area.

The Buffalo River originates in Newton County, and flows generally eastward for 150 miles to its confluence with the White River. The Arkansas Pollution Control and Ecology Commission designated the Buffalo River as an Extraordinary Resource Water and a Natural and Scenic Waterway because of its aesthetic beauty and recreational use. The watershed crosses parts of Madison, Newton, Boone, Pope, Marion, Van Buren, Searcy, Baxter, and Stone counties (Figure 1).

Landownership in the watershed consists of approximately 60% private land, 35% federal land, 3% state-owned land, and 2% other ownership. The watershed is primarily forested (80%), with pasture, developed, and other use accounting for the remaining landscape.¹ The Ozark National Forest accounts for the majority of the watershed's forested area.

In 1972, Congress designated the Buffalo River as the nation's first National River. Public Law 92-237 created the Buffalo National River: 135 miles of the free-flowing Buffalo, nearly 90% of its total length and nearly 100,000 surrounding acres. The Buffalo National River is administered by the U.S. Department of Interior's

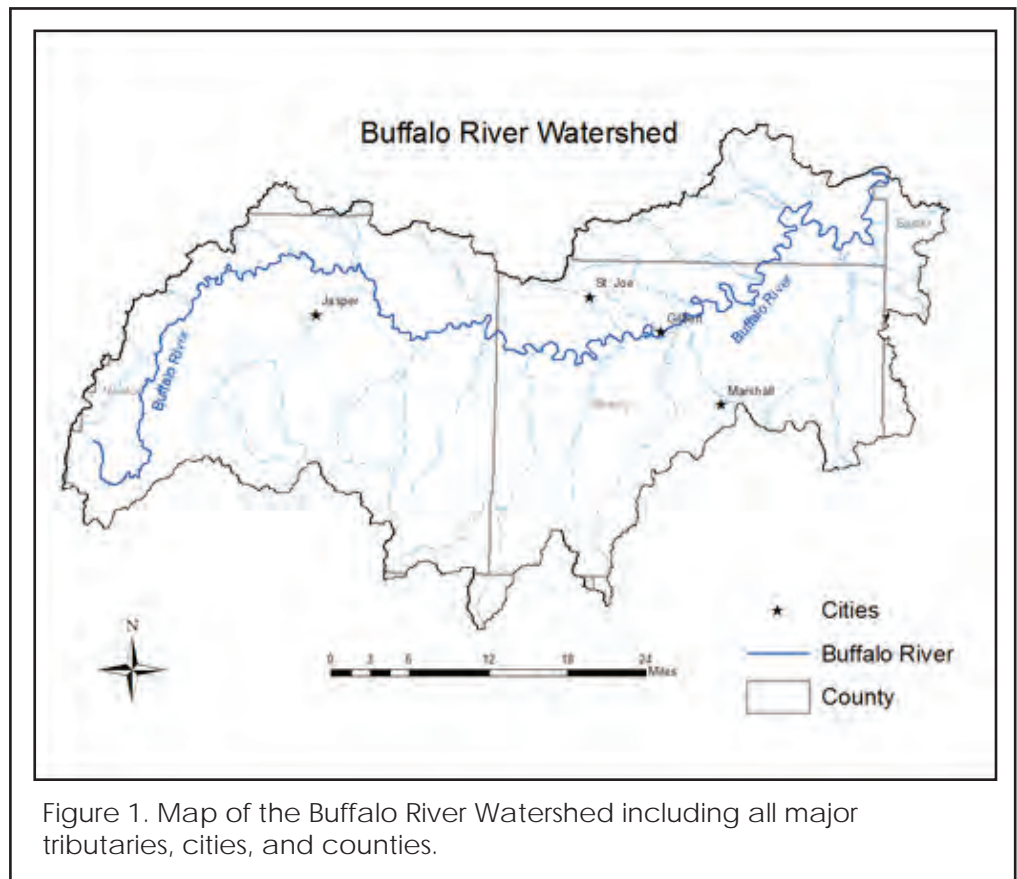


Figure 1. Map of the Buffalo River Watershed including all major tributaries, cities, and counties.

¹Land use values based on the 2011 National Land Cover Database.

BUFFALO RIVER OVERVIEW

National Park Service (NPS) from the Buffalo National River's main office located in Harrison, AR. Unique natural features like multi-colored bluffs, caves, springs, sinkholes, waterfalls, and large rock formations can be found throughout the watershed (Figure 2.)

TOURISM

While a majority of the acreage in the Buffalo River Watershed is privately owned, the Buffalo River and its attendant corridor is one of the most beloved pieces of the public trust in the United States. Along with the Buffalo itself, the river's corridor is also a National Park, and NPS-managed campgrounds and recreation areas dot the length of the river from the Boxley Valley in the upper reaches to Rush Landing on the lower end. The headwaters above Boxley and the 28 miles from Rush to the Buffalo's confluence with the White River are designated wilderness areas; recreational use is allowed, but no improvements or services are offered, and the landscape remains in a natural state.

More than any other part of the watershed, the Buffalo River Watershed drives tourism in the area, drawing 1.5 million visitors annually. Considered one of the great non-whitewater canoeing streams in the United States, the Buffalo River sees heavy watercraft use in the spring and summer, when usage peaks in the campgrounds and popular upriver floating stretches, and lighter use—but still significant—in the fall and winter months, when overnight canoe-camping is popular with anglers and other outdoor enthusiasts eager to leave the campground crowds behind.

Visitors also take advantage of the two designated Arkansas Scenic Byways that meander through the Buffalo River Watershed. Arkansas Highways 7 and 21 are considered priority attractions by the ADPT, as driving for pleasure remains a popular recreational activity and one that is well-served by the watershed's winding, scenic highways. In recent years, motorcycle tourism has been identified as a popular and growing component of Arkansas's overall tourism industry, and there are many motorcycle touring routes available for sightseers throughout the watershed.



Photo courtesy
Arkansas Department of Parks and Tourism

Figure 2. Image of an outcropping on the Buffalo National River.

BUFFALO RIVER OVERVIEW

As mentioned above, outside of the Buffalo National River corridor, most of the land in the watershed is privately owned. Most of that land is dedicated to either private forestland (both commercial and non-) or small-scale livestock operations. Recent trends in Arkansas, however, show more Arkansas farmers becoming involved in agritourism in order to supplement farm incomes. Several agritourism businesses—wherein visitors pay for the chance to lodge at, and perhaps labor on, a working farm—have opened in the watershed in recent years, and many of those use proximity to the Buffalo National River and its pristine environs as a primary selling point. ADPT is actively promoting such businesses through its website and other media, and sees agritourism as an important component of not only sustainable economic growth, but conservation of the watershed's natural resources as well.

AGRICULTURE

Agriculture is Arkansas's largest industry, returning more than \$20 billion to the state's economy annually and providing one of every six jobs in the state. Agriculture is also a significant industry within the nine counties containing the Buffalo River Watershed. The area is home to 6,905 family farms on 1.4 million acres that produce agriculture products valued at more than \$657 million annually.

Poultry, cattle, and hay are the top three agricultural commodities produced in the region, but the watershed's wide range of agricultural diversity is reflected in the variety of animals, plants, and processed items produced by Arkansas Grown and Arkansas Made members, AAD's branded programs. Members with livestock raise beef, goats, sheep, turkeys, chickens, and American bison. Specialty crops grown by members include ornamental shrubs and flowers, Christmas trees, culinary herbs, beans, berries, squash, tomatoes, corn, cabbage, peppers, apples, melons, onions, grapes, kale, and many others. Processed foods and products include candy, bread and other baked goods, jams, jellies, and preserves, yogurt, as well as soaps and balms. The number of agritourism operations developing around this diversity is increasing across the watershed.

The collective land cover of Madison, Newton, Boone, Pope, Marion, Van Buren, Searcy, Baxter, and Stone counties is approximately 68% or more than 2.75 million acres forested. The aggregate area of all the counties, not just the watershed portions, contains 18.3 million tons of standing pine and more than 119 million tons of standing hardwood. The forest industry provides more than 1,000 jobs in the region. AAD's Forestry Commission works directly with forest landowners to develop forest management plans and provide education and training on forest stewardship and best management practices.

FIRST YEAR KEY PRIORITIES

Priority 1: Create an open and effective forum for interested stakeholders to engage with each other, share relevant information regarding potential issues, and work collaboratively to improve or maintain the water quality of the Buffalo River.

During the first year, BBRAC met on four occasions. Throughout those four meetings, ten speakers representing community organizations and state and federal agencies shared information regarding conservation efforts within the Buffalo River Watershed that promote water quality (Table 1). An independent website (www.bbrac.arkansas.gov) was created to engage the public, share resources, and provide direct contact with BBRAC members. Similarly, video recordings and meeting materials from each of the committee meetings were made available on the website to Buffalo River Watershed stakeholders. The Committee also formed the BBRAC Executive Subcommittee to develop recommendations for collaborative projects and to manage committee efforts. The Executive Subcommittee met on six occasions during the first year.

Table 1. Presentations given at BBRAC meetings during the first year.

Meeting	Presentation	Speaker	Organization
1	Beautiful Buffalo	Becky Keogh	AR Department of Environmental Quality
1	Buffalo National River Water Quality Priorities	Shawn Hodges	National Park Service
2	Arkansas Unpaved Roads Grant Program	Alex Johnston	Division of Rural Services of the Arkansas Economic Development Commission
2	Better Unpaved Roads for People and Nature	Scott Simon	The Nature Conservancy of Arkansas
2	Arkansas Swim Beach Program	Nathaniel Smith	Arkansas Department of Health
2	Buffalo National River <i>E. coli</i> Monitoring	Nathaniel Smith	Arkansas Department of Health
3	Private Land Conservation in the Buffalo River	Scott Simon	The Nature Conservancy of Arkansas and Buffalo River Foundation
3	Project Initiatives in the Buffalo River Watershed	Jessie J. Green	White River Waterkeeper
4	Arkansas Harmful Algal Bloom Workshop	Reed Green	U.S. Geological Survey
4	Algal Bloom Reporting Tools	Caleb Osborne	AR Department of Environmental Quality

FIRST YEAR KEY PRIORITIES

Priority 2: Initiate the development of a Buffalo River Watershed Management Plan.

An important step in protecting and enhancing water quality in these waterbodies is to prepare a watershed management plan (WMP) and build local support for its implementation. The WMP was developed with financial assistance and guidance from the United States Environmental Protection Agency (EPA), Region 6. ADEQ issued \$99,831.00 from an EPA multi-purpose grant to ANRC for the purpose of developing the Buffalo River WMP. The EPA recommended a nine element watershed-based plan to guide implementation of management practices. Once the plan is prepared by ANRC and accepted by EPA, local stakeholders can apply for nonpoint source grant funds to implement best management practices identified in the plan to control, reduce, or abate nonpoint source pollution and protect water quality. The nine elements to be addressed in the WMP include:

1. Identifying water quality impairment or pollutant source.
2. Determining pollutant load reduction targets.
3. Identifying control mechanisms.
4. Estimating WMP implementation cost.
5. Enhancing public understanding through education and outreach components.
6. Developing implementation schedule.
7. Describing measurable milestones.
8. Determining success criteria.
9. Monitoring and evaluating plan effectiveness based on success criteria.

With those funds, ANRC contracted FTN Associates, Ltd. (FTN), an engineering and environmental consulting firm based in Little Rock to assist with the development of the

Buffalo River WMP. Starting in December of 2016, ANRC sponsored and FTN facilitated four stakeholder meetings as part of the development of the voluntary, non-regulatory, WMP for the Buffalo River Watershed (Table 2). Stakeholders in attendance included farmers, landowners, political representatives, state and federal agencies, and interest groups representing agriculture, conservation, and recreation.

Table 2. Stakeholder meeting dates, locations, and attendance sponsored by ANRC as part of the development of a voluntary, non-regulatory WMP for the Buffalo River Watershed.

Date	Location	Number of Attendants
December 08, 2016	Marshall, AR	130
March 30, 2017	Jasper, AR	65
June 08, 2017	Marshall, AR	40
October 12, 2017	Jasper, AR	30

Watershed-based management planning typically occurs in six steps:

1. Building partnerships,
2. Characterizing the watershed,
3. Finalizing management goals and identifying solutions,
4. Designing an implementation program,
5. Implementing the watershed-based management plan, and
6. Measuring progress and making adjustments through adaptive management.

During the first year, the WMP proceeded through the first four steps in the planning process. Progress will be documented in the nine-element watershed-based management plan.

FIRST YEAR KEY PRIORITIES

Priority 3: Identify early action and effective projects able to be implemented immediately that are expected to jump-start improvements or maintain the sustained vitality of the Buffalo River Watershed.

The Nature Conservancy, White River Waterkeeper, and Arkansas Economic Development Commission (AEDC), Division of Rural Services, presented effective practices for sustaining water quality within the Buffalo River Watershed to BBRAC. AGFC announced that it has contributed \$300,000 to the Unpaved Roads Program over the last two years and will partner with AEDC on future funding commitments. BBRAC recommended communication with the county judges and the county-wide chambers of commerce within the Buffalo River Watershed to encourage participation in the annual unpaved roads training program offered by AEDC, Division of Rural Services.

ANRC, ADH, AAD, ADPT, and AGFC announced their membership on the newly formed Arkansas Feral Hog Eradication Task Force. The task force will continue to meet under a memorandum of understanding following the completion of the first year. The BBRAC Executive Subcommittee recommended the development of a collaborative educational workshop highlighting best management practices including, but not limited to, local Conservation Districts, U.S. Forest Service, AGFC, and the University of Arkansas Cooperative Extension Service.

ADEQ launched a Nuisance Algal Bloom reporting tool and responded to reports of algal blooms in the Buffalo River in cooperation with the Buffalo National River. ADEQ announced that its laboratory would begin analysis of Total Suspended Solids (TSS) for water samples to aid in the evaluation of stream bank erosion in the Buffalo River Watershed.

The BBRAC website provided links to current conservation programs available to stakeholders of the Buffalo River Watershed.

FIRST YEAR KEY PRIORITIES

Priority 4: Consider the state of current scientific investigation in the watershed and prioritize future research needs.

BBRAC was presented a report on *E. coli* monitoring in the Buffalo River Watershed from ADH. ADH and ANRC are developing a study to assess failing septic systems in the watershed, with the intent to determine failure rates and identify estimated costs to repair those systems. ADH has also applied for a grant through the Centers for Disease Control to further develop opportunities to assist landowners with failing septic systems.

NPS presented a report to BBRAC on water quality monitoring in the Buffalo National River. BBRAC also heard a report from ADEQ concerning *E. coli* and water quality sampling in Mill Creek of the Buffalo River Watershed. ADEQ committed \$4,100 to a special project monitoring *E. coli* levels in Mill Creek, which was completed this year. In addition, ADEQ and the U.S. Geological Survey (USGS) are developing a study to track nutrient and bacterial sources in the Mill Creek Watershed. ADEQ committed \$86,000 to this project, which will be matched by USGS. ADH and AGFC have each committed \$3,250 to the Mill Creek research.

AGISO developed a report entitled *Characterizations of Roads within the Buffalo River Watershed* which is available for review on the BBRAC website.

During the development of the watershed management plan (WMP), FTN Associates, Ltd (FTN) analyzed thirty years of Buffalo River Watershed data to prioritize subwatersheds and make recommendations for implementation of conservation practices to maximize water quality. In addition, FTN was contracted to complete a Soil and Water Assessment Tool model for the Buffalo River Watershed, which was funded by ANRC in the amount of \$119,998.

The BBRAC website provided links to state and federal agency data and research relevant to the Buffalo River Watershed.

MEASURABLE OBJECTIVES

BBRAC developed a list of proposed measurable objectives to guide its mission moving forward.

1. Preserve and Improve Water Quality
2. Increase Tourism
3. Expand Agricultural Opportunities
4. Enhance and Support Economic Growth
5. Expand Educational Opportunities and Empower Communities

In the next year, BBRAC will outline specific metrics to track activities in the watershed and inform the measurable objectives. A preliminary list includes, but is not limited to, the metrics identified below. Each metric reflects activity in the Buffalo River Watershed or associated counties and is intended to be reported yearly, unless otherwise indicated.

Table 3. Alignment of Governor Hutchinson’s Strategy for Arkansas with BBRAC’s measurable objectives.

Governor’s Goals	BBRAC’s Goals
<p>Educate – Support a path of life-long learning for Arkansans</p> <p>Safe – Protecting the public’s safety and security</p> <p>Efficient and Responsive – Transform the culture of state government</p> <p>Quality of Life</p>	<p>Preserve & Improve Water Quality</p> <ul style="list-style-type: none"> • Number of stream miles assessed per assessment cycle • Percent of assessed stream miles attaining their designated uses per assessment cycle • Number of water samples analyzed for water quality parameters • Number of stream miles affected by nuisance algal blooms • Number of septic systems approved • Number of conservation programs in practice
<p>Grow – Create jobs and grow Arkansas’s economy</p> <p>Healthy – Accessible care and active lifestyle</p> <p>Efficient and Responsive – Transform the culture of state government</p> <p>Quality of Life</p>	<p>Increase Tourism</p> <ul style="list-style-type: none"> • Number of visitors

MEASURABLE OBJECTIVES

Governor's Goals	BBRAC's Goals
<p>Grow – Create jobs and grow Arkansas's economy</p> <p>Educate – Support a path of life-long learning for Arkansans</p> <p>Efficient and Responsive – Transform the culture of state government</p> <p>Quality of Life</p>	<p>Expand Agricultural Opportunities</p> <ul style="list-style-type: none"> • Number of farms • Number of farms using conservation practices • Number of forest management programs in practice
<p>Grow – Create jobs and grow Arkansas's economy</p> <p>Healthy – Accessible care and active lifestyle</p> <p>Efficient and Responsive – Transform the culture of state government</p> <p>Quality of Life</p>	<p>Enhance and Support Economic Growth</p> <ul style="list-style-type: none"> • Total population • Number of farms • Number of visitors • Total dollar amount generated by tourism tax • Total amount of economic impact by feral hogs
<p>Educate – Support a path of life-long learning for Arkansans</p> <p>Healthy – Accessible care and active lifestyle</p> <p>Efficient and Responsive – Transform the culture of state government</p> <p>Quality of Life</p>	<p>Expand Educational Opportunities and Empower Communities</p> <ul style="list-style-type: none"> • Number of stream team activities • Number of conservation education events



Mission Statement

To protect the Buffalo National River's scenic beauty, high-quality water, unique species and habitat, agricultural value, and exceptional recreational uses through the coordination of resources within the Buffalo River Watershed.

Roles and Responsibilities

The role of the Beautiful Buffalo River Action Committee (BBRAC) is to provide direction and support for coordinating the actions of Arkansas state agencies and interested partners on water quality related research, policy, and management decisions affecting the Buffalo River Watershed (BRW).

Governor Asa Hutchinson directed the BBRAC to "establish measurable objectives, set achievable action items, establish durable partnerships, share agency resources, and inform policymakers and the general public of relevant progress."

In carrying out these efforts, the BBRAC may establish subcommittees or working groups to meet these goals. Meetings will be scheduled in a manner to remain transparent, foster stakeholder involvement, and share agency resources. Meetings of the executive committee will be scheduled and noticed at least two weeks in advance. Information will be posted on a website, which will be routinely updated with all relevant information regarding meeting minutes, timelines, agendas, annual reports, etc. In addition, since the Buffalo National River is a treasured resource from the national to local level, all committee meetings will provide a forum to receive input from the public.

The Executive Committee will nominate a secretary responsible for keeping detailed meeting minutes. The Executive Committee will submit annual progress reports to the Governor, beginning on January 31, 2018.

Meetings

As directed by Governor Hutchinson, the BBRAC will hold, at a minimum, quarterly meetings. Meetings will be held the third Tuesday of the month.

Proposed Quarterly Meeting Format

- Approval of minutes from previous meeting
- Individual agency reports on watershed activities and issues
- Partner presentations – to be selected
- Watershed Management Plan progress report – as available

Executive Team

Arkansas Department of Environmental Quality, Director (Co-Chair)
Arkansas Natural Resource Commission, Director (Co-Chair)
Arkansas Department of Health, Director
Arkansas Department of Parks and Tourism, Director
Arkansas Agriculture Department, Director
Arkansas Game and Fish Commission, Director (ex officio)
Arkansas Geographic Information Systems Office, Director (ex officio)

Subcommittees

Subcommittees will be established based on need and determined by the Executive Team.