

ADEQ Headquarters  
5301 Northshore Drive  
North Little Rock, AR, 72118

September 1, 2018

Re: 303d Waterbody Comments

Our comments are in response to ADEQ's proposed inclusion in the Draft 2018 Impaired Waterbodies List (303(d) list) of two segments of Big Creek and two segments of Buffalo River in Category 4b. The proposed inclusion of Big Creek (AR\_11010003\_022) for pathogens, Big Creek (AR\_11010003\_020) for dissolved oxygen, and Buffalo River segments AR\_11010005\_011 and AR\_11010005\_010 for pathogens in Category 4b (*Water quality standards are not attained for one or more designated uses but the development of a TMDL is not required*) falls short of the appropriate emphasis needed for the problems found in these segments.

ADEQ has used sound science to determine that Big Creek and adjacent segments of the Buffalo National River are threatened. However, Category 5 is the appropriate designation and is necessary to correct the existing sources of impairment through the development of Total Maximum Load (TMDL) plans under the Clean Water Act, in addition to other corrective actions.

The Beautiful Buffalo River Action Committee (BBRAC) has been established for the purpose of addressing 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. A key priority of BBRAC was to initiate the development of a Buffalo River Watershed Management Plan (BRWMP). This plan was developed for the Buffalo River Watershed, and the final plan was submitted and accepted by EPA in June 2018. Watershed management plans are recognized by EPA as state-led management approaches expected to result in the attainment of water-quality standards.

ADEQ identifies the BRWMP as the "alternative plan in place" to justify the inclusion of the impaired segments in Category 4b allowing for alternative, voluntary water management plans rather than to develop a TDML under Category 5. The decision is flawed for these reasons:

A completely voluntary water management plan precludes consideration of point-sources and permitted facilities. The C&H concentrated agricultural feeding operation (CAFO) is a permitted facility and thus is expressly excluded from regulation in Category 4b. The waste from thousands of hogs at C&H is spread on farm lands adjacent to Big Creek. As Governor Hutchinson stated when announcing BBRAC, and as has been made clear at subsequent BBRAC and BRWMP meetings, all actions undertaken by the BBRAC and BRWMP are completely voluntary and non-regulatory. The plan of C&H is for operations leading to inadvertent nutrient loading including phosphorous contributing to pollution in Big Creek.

The BRWMP is not "required" by Arkansas regulations (40 CFR 130.7 (b)(1)) to implement water quality standards within a reasonable period of time. Without more proactive, stringent and enforceable measures being taken, the water quality of Big Creek and the Buffalo River will continue to deteriorate, making remedial action more difficult and prolonged.

In Arkansas, water management plans have historically been ineffective in achieving remediation, particularly in the short term. As regards the threat of phosphorous related pollution from hog waste laden fields adjoining Big Creek, Dr. Andrew Sharpley, an acknowledged expert in the transport of phosphorus, has written in his report "*Phosphorus Legacy: Overcoming the Effects of Past Management Practices to Mitigate Future Water Quality Impairment*,"



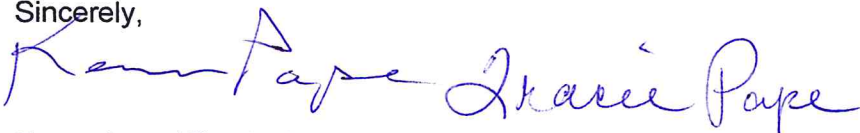
*"Best management practices, which promote the retention of eroded soil, sediment, water, and nutrients within the landscape (such as buffer zones and wetlands) have been successful in storing P and thus smoothing out peaks in P delivery to downstream receiving waters (Reddy et al., 1999; Uusi-Kamppa et al., 2000). These BMPs protect downstream aquatic environments from high P loads and concentrations; without them, the impacts of agricultural P losses on downstream water quality would have been more acute. **By concentrating P storage at specific locations in the landscape, however, these practices can create longer term and continuing sources of legacy P to receiving waters. ...Best management practices can become inadvertent causes of legacy P transfers within watersheds...Because of the lag time between BMP implementation and water quality improvements, remedial strategies should consider the time necessary for re-equilibration of watersheds and water bodies, where nutrient sinks may become sources of P with only slight changes in watershed management and hydrologic response.**"*

Considering this and other peer reviewed research, water management plans alone are inadequate to address the impairment of Big Creek and the Buffalo River. Due to nutrients and other sources of pollution, immediate and enforceable actions are called for. These added remedies are provided under Category 5 status.

I therefore request inclusion of Big Creek and the Buffalo River in Category 5 because:

- 1) The BRWMP cannot address point-source contamination. CAFOs are point sources, as defined by the CWA [Section 502(14)] . C&H is currently operating under an NPDES CAFO permit, the expiration of which was stayed by the Arkansas Pollution Control and Ecology Commission on January 17, 2018 (Minute Order No. 18-01).
- 2) The BRWMP cannot address regulated facilities. C&H is currently operating under an expired NPDES permit.
- 3) The BRWMP is voluntary and non-regulatory and any best management practices which might be implemented are not "*required by local, state, or Federal authority*" and do not comply with 40 CFR 130.7 (b)(1).
- 4) The BRWMP has no investigative or enforcement authority and is not stringent enough to comply with 40 CFR 130.7 (b)(1).
- 5) The BRWMP prioritizes six specific tributaries, which do not include Big Creek or the impaired segments of the Buffalo. Repeated requests to include Big Creek were denied priority status due to "insufficient data." That data is available from data gathered by individuals using scientific sampling procedures.

Sincerely,



Kenneth and Tracie Pape,  
Bull Shoals, Arkansas