

10/31/2016

The list of streams below is a lot of water and streams to monitor for both the EPA and Arkansas ADEQ. I agree. I also feel water quality needs to be monitored, protected and flagged if any of it does not meet the EPA standards. More effort trying to identify possible threats and organize plans to address them rather than doing a re-write if one hits a bump in the road. Other words, don't water down the EPA standards because it is easier than saying things are impaired or impacted. This is only my opinion, but I hope I can make one example for the ease at which things can be watered down or over "streamlined" at the state level. The following is from a recent Public Comment session that had legitimate concerns and folks like the National Park Service (I feel they NPS can be trusted for commenting on issues they feel need to bring up since they are asked to take of the waters once they are in their Parks, NPS seem to be trying to do their mission statement.

The National Park Service Mission:

"The National Park Service preserves unimpaired the natural and cultural resources and values of the National Park System for the enjoyment, education, and inspiration of this and future generations. The Park Service cooperates with partners to extend the benefits of natural and cultural resource conservation and outdoor recreation throughout this country and the world."

This is just one example:

#### **Responsiveness Summary to Comments Concerning Arkansas's Draft 2016 303(d) List**

Comments Concerning the Buffalo River Tributaries More than 150 comments were received requesting three tributaries to the Buffalo River, Mill Creek, Big Creek, and Bear Creek be added to the 2016 list of impaired waterbodies. The commenters were concerned Escherichia coli concentrations in Mill Creek exceeded the state water quality standard. The concern was that Mill Creek would not be safe to swim in nor would the Buffalo River downstream of Mill Creek. 4 The commenters were also concerned the dissolved oxygen concentrations in Big Creek and Bear Creek are not meeting the state water quality standard. They were concerned that the aquatic life communities in these two streams, and downstream in the Buffalo River may be adversely affected. ADEQ has assessed the data associated with these three tributaries in accordance with the current Assessment Methodology established for the development of the list of impaired waterbodies for 2016. Most of the data used by the commenters did not meet the requirements as set forth in the methodology as being distributed over at least three seasons and two years. In addition, ADEQ does not currently have an assessment methodology to address continuous recording in situ data. ADEQ appreciates these comments from individuals who have taken an interest in protecting the waters of the state and hopes that this interest will continue. ADEQ will be investigating methods to assess continuous recorded data to assist in the evaluation of data for future assessments. In addition, ADEQ will stay informed about the water quality in these waterbodies and will continue to monitor the issue."

**“National Park Service – Main Stem Buffalo River Comment 1:** The commenter is concerned that the lower 11.3 miles of the Buffalo River, stream segment 001, was removed from the list of impaired water bodies but did not show up on the removed list spreadsheet. In addition, segment 005 of the Buffalo was not on the impaired list and was also not on the removed spreadsheet.

**Response 1:** ADEQ removed each of these stream segments from the 303(d) List because each are currently meeting water quality standards. The removed stream spreadsheet is simply a reference spreadsheet and is not part of the list of impaired waterbodies. ADEQ acknowledges the comment and appreciates the commenter identifying this typographical error. The removed listing spreadsheet has been revised to the removal of Buffalo River reach 001.

In the above example the response was “currently meeting water quality standards”. Where is the data and did you include all tools for this assessment, like Biological Monitoring of Macroinvertebrates. It appears to me many of the streams in your data base have vintage surveys. When one reads, “currently meeting water quality standards” can I assume your group have current data for things like the suggested impaired water bodies in the example comment and response above or do we just have to have lots of “faith”?

#### **“Reg. 2.405 Biological Integrity**

For all waters with specific aquatic life use designated in Appendix A, aquatic biota should not be impacted. Aquatic biota should be representative of streams that have the ability to support the designated fishery, taking into consideration the seasonal and natural variability of the aquatic biota community under naturally varying habitat and hydrological conditions; the technical and economic feasibility of the options available to address the relevant conditions; and other factors.

An aquatic biota assessment should compare biota communities that are similar in habitat and hydrologic condition, based upon either an in-stream study including an upstream and downstream comparison, a comparison to a reference water body within the same ecoregion, or a comparison to community characteristics from a composite of reference waters. Such a comparison should consider the seasonal and natural variability of the aquatic biota community. It is the responsibility of the Department to evaluate the data for an aquatic biota assessment to protect aquatic life uses designated in Appendix A. Such data may be used to develop permit effluent limitations or conditions.”

## Streams Monitoring Program

**“Often, water quality monitoring alone is not sufficient to determine whether aquatic life is being impaired.”**

<https://www.adeg.state.ar.us/water/planning/surface/>

“Biological monitoring is an important component of assessing Arkansas’s waters. Often, water quality monitoring alone is not sufficient to determine whether aquatic life is being impaired. Conducting biological surveys is an effective way to determine how pollution from point and nonpoint sources affects ecosystems. Long term monitoring of chemical, physical, and biological data can help increase our knowledge of direct and indirect effects of natural and man-made stressors.”

**Under “Biological Monitoring” (some surveys are vintage and may not be up to date enough to use as a tool help determine the quality of our waters or if some may actually be impaired)**

- **Macroinvertebrates**

“Extensive research has been compiled on the life history, tolerance, and habitat requirements of aquatic macroinvertebrates, making them exceptional indicators of ecosystem health. With limited mobility and relatively short lifespans, these organisms provide insight into localized and current water quality conditions. **Aquatic macroinvertebrate data** are available on ADEQ’s website.”

<https://www.adeg.state.ar.us/water/planning/surface/macroinvertebrates.aspx>

Sincerely,  
John Murdoch  
1190 Elk Ridge  
Wesley, AR 72773-9111

**REGULATION NO. 2.  
APPENDIX D**

**LIST OF CURRENT EXTRAORDINARY  
RESOURCE WATERS, ECOLOGICALLY  
SENSITIVE WATERBODIES, AND NATURAL AND  
SCENIC WATERWAYS**

**APPENDIX D: LIST OF CURRENT EXTRAORDINARY  
RESOURCE WATERS, ECOLOGICALLY SENSITIVE  
WATERBODIES, AND NATURAL AND SCENIC WATERWAYS**

---

**Extraordinary Resource Waters**

**Stream Name Ecoregion Plate**

Alum Fork Saline River Ouachita Mountains OM-2  
Archey Creek Boston Mountains BM-2  
Arkansas River Delta D-5  
Beech Creek Boston Mountains BM-3  
Big Creek Arkansas River Valley ARV-3  
Big Creek Ozark Highlands OH-4  
Big Fork Creek Ouachita Mountains OM-1  
Big Piney Creek Boston Mountains BM-2  
Buffalo River Boston Mountains BM-1, BM-2  
Buffalo River Ozark Highlands OH-2, OH-3  
Bull Shoals Reservoir Ozark Highlands OH-2, OH-3  
Cache River Delta D-3  
Caddo River Ouachita Mountains OM-1, OM-2  
Cadron Creek Arkansas River Valley ARV-2, ARV-3  
Caney Creek Ouachita Mountains OM-1  
Cossatot River Ouachita Mountains OM-1  
Current River Ozark Highlands OH-4  
DeGray Reservoir Ouachita Mountains OM-2  
Devils Fork of Little Red River Boston Mountains BM-3  
East Fork Cadron Creek Arkansas River Valley ARV-2, ARV-3  
East Fork Illinois Bayou Boston Mountains BM-2  
Eleven Point River Ozark Highlands OH-4  
English Creek Ozark Highlands OH-4  
Falling Water Creek Boston Mountains BM-2  
Field Creek Ozark Highlands OH-4  
Gut Creek Ozark Highlands OH-4  
Hurricane Creek Boston Mountains BM-2  
Illinois Bayou Boston Mountains BM-2  
Kings River Boston Mountains BM-1  
Kings River Ozark Highlands OH-2  
Lake Ouachita Ouachita Mountains OM-1, OM-2  
Lee Creek Boston Mountains BM-1

Lick Creek Boston Mountains BM-3  
Little Missouri River Ouachita Mountains OM-1  
Little Raccoon Creek Boston Mountains BM-3  
Little Strawberry River Ozark Highlands OH-3  
Middle Fork Illinois Bayou Boston Mountains BM-2  
Middle Fork Little Red River Boston Mountains BM-2, BM-3  
Middle Fork Saline River Ouachita Mountains OM-2  
Moro Creek Gulf Coastal Plain GC-2  
Mountain Fork River Ouachita Mountains OM-1  
Mulberry River Ouachita Mountains OM-1  
Mulberry River Arkansas River Valley ARV-1  
Mulberry River Boston Mountains BM-1, BM-2  
Myatt Creek Ozark Highlands OH-3, OH-4  
North Fork Cadron Creek Arkansas River Valley ARV-2, ARV-3  
North Fork Illinois Bayou Boston Mountains BM-2  
North Fork Saline River Ouachita Mountains OM-2  
North Sylamore Creek Ozark Highlands OH-3  
Raccoon Creek Boston Mountains BM-3  
Richland Creek Boston Mountains BM-2  
Salado Creek Boston Mountains BM-3  
Saline River Gulf Coastal Plain GC-2, GC-3  
Saline River Ouachita Mountains OM-2  
Second Creek Delta D-4  
South Fork Caddo River Ouachita Mountains OM-1  
South Fork Saline River Ouachita Mountains OM-2  
South Fork Spring River Ozark Highlands OH-3, OH-4  
Spring River Ozark Highlands OH-4  
Strawberry River Delta D-1  
Strawberry River Ozark Highlands OH-3, OH-4  
Tomahawk Creek Boston Mountains BM-3  
Turkey Creek Boston Mountains BM-3  
Two Bayou Prairie Delta D-3

## Natural and Scenic Waterways

### Stream Name Ecoregion Plate

Big Piney Creek Boston Mountains BM-2\*  
Brushy Creek Ouachita Mountains OM-1  
Buffalo River Boston Mountains BM-1, BM-2  
Buffalo River Ozark Highlands OH-2, OH-3  
Cossatot River Ouachita Mountains OM-1  
Hurricane Creek Boston Mountains BM-2\*  
Kings River Boston Mountains BM-1  
Kings River Ozark Highlands OH-2  
Little Missouri River Ouachita Mountains OM-1  
Mulberry River Arkansas River Valley ARV-1  
Mulberry River Boston Mountains BM-1, BM-2  
North Sylamore Creek Ozark Highlands OH-3\*  
Richland Creek Boston Mountains BM-2\*  
Saline River Gulf Coastal Plain GC-3  
Strawberry River Ozark Highlands OH-3, OH-4

\* As designated in the National Wild and Scenic Rivers System

## Ecologically Sensitive Water Bodies

### Stream Name Ecoregion Plate

Alum Fork Saline River Ouachita Mountains OM-2  
Archey Creek Boston Mountains BM-2  
Beech Fork Boston Mountains BM-3  
Black River Delta D-1  
Brushy Creek Ouachita Mountains OM-1  
Caddo River Ouachita Mountains OM-1  
Caney Creek Ouachita Mountains OM-1  
Collier Creek Ouachita Mountains OM-1  
Cossatot River Ouachita Mountains OM-1  
Current River Ozark Highlands OH-4  
Departee Creek Delta D-1  
Devils Fork Little Red River Boston Mountains BM-3  
Eleven Point River Ozark Highlands OH-4  
Grassy Lake Gulf Coastal Plain GC-1  
Illinois River Ozark Highlands OH-1  
Little Missouri River Ouachita Mountains OM-1  
Little Raccoon Creek Boston Mountains BM-3  
Little Red River Gulf Coastal Plain GC-1  
Little Strawberry River Ozark Highlands OH-3  
Lick Creek Boston Mountains BM-3  
Lick Creek Ouachita Mountains OM-1  
Mayberry Creek Ouachita Mountains OM-2

Middle Fork Little Red River Boston Mountains BM-2, BM-3  
Middle Fork Saline River Ouachita Mountains OM-2  
Mill Creek Ouachita Mountains OM-1  
Missouri River Gulf Coastal Plain GC-2  
Mountain Fork River Ouachita Mountains OM-1  
North Fork Saline River Ouachita Mountains OM-2  
Otter Creek Ozark Highlands OH-3  
Ouachita River Ouachita Mountains OM-1  
Ouachita River Gulf Coastal Plain GC-2, GC-4  
Polk Creek Ouachita Mountains OM-1  
Robinson Creek Ouachita Mountains OM-1  
St. Francis River Delta D-4  
Saline River Ouachita Mountains OM-2  
Saline River Gulf Coastal Plain GC-3  
South Fork Caddo River Ouachita Mountains OM-1  
South Fork Ouachita River Ouachita Mountains OM-1  
South Fork Saline River Ouachita Mountains OM-2  
Ten Mile Creek Ouachita Mountains OM-2  
Raccoon Creek Boston Mountains BM-3  
Right Hand Chute Little River Delta D-2  
Rock Creek Ouachita Mountains OM-1  
Rock Creek Ozark Highlands OH-4  
South Fork Little Red River Boston Mountains BM-2  
Spring River Ozark Highlands OH-4  
Straight Slough Delta D-2, D-4  
Strawberry River Ozark Highlands OH-3, OH-4  
Tomahawk Creek Boston Mountains BM-3  
Turkey Creek Boston Mountains BM-3  
Various springs &  
spring-fed tributaries Ozark Highlands OH-1, OH-2, OH-3  
White River Boston Mountains BM-1  
Yellow Creek Gulf Coastal Plain GC-1

**Like I mentioned earlier, that it is a lot of water to monitor and protect but it is something we can all do for now and future generations. Water is critical for survival for all humans and critters.**

**John**