

From: [Teresa Turk](#)
To: [ImpairedWaterbodies_Comments](#)
Cc: ["Hunt.Laura@epa.gov"](mailto:Hunt.Laura@epa.gov)
Subject: National Parks Conservation Association comments on the proposed 303(d) list
Date: Tuesday, March 15, 2016 11:37:59 AM
Attachments: [npc_a_comments_1_303d.pdf](#)
[npc_a_comments_2_303d.pdf](#)
[npc_a_comments_3_303d.pdf](#)
[npc_a_comments_4_303d.pdf](#)
[npc_a_comments_5_303d.pdf](#)

Dear ADEQ,

Please find attached the official comments from the National Parks Conservation Association with respect to the 2016 proposed 303(d) list of impaired water bodies in the state of Arkansas. I hope and look forward to the agency initiating substantial changes to include using all available data and greatly improving the transparency of the entire evaluation and review process.

Best Regards,
Teresa Turk

Teresa Turk
Fellow, Buffalo National River
National Parks Conservation Association
1408 W Cleveland St.
Fayetteville, AR 72701

Mobile: 479-866-7772



Arkansas Department of Environmental Quality (ADEQ)
5301 Northshore Drive
North Little Rock, AR 72118-5317
ImpairedWaterbodies_Comments@adeq.state.ar.us

March 15, 2016

Dear Director Keogh,

Thank you for providing an opportunity to comment on the 2016 proposed 303-d listing of water bodies in Arkansas. These comments are made on behalf of the National Parks Conservation Association (NPCA). I would like to call your attention to the conspicuous absence of Mill Creek and Upper Buffalo-Newton County-Big Creek on this list of impaired streams.

As you know, the Buffalo River is the iconic symbol of Arkansas's motto "The Natural State" and is the reason why tourists spent over \$56 million, creating 890 jobs in this area of rural Arkansas in 2014 according to the National Park Service. Statewide in 2014 tax collections from tourism were up 7.04% over calendar 2013 with a total of \$13.79 million. Employment in the tourism sector is up 23% in the past 10 years (AR Parks and Recreation Annual report 2014-2015). Residents of Newton and Searcy County are in desperate need of jobs as these counties are some of the poorest in the state and nation. Jobs generated from tourism tend to be long term and sustainable. Tourism is a vital part of our state's economy and is highly dependent upon tourists recreating in clean waters-free of algae, harmful bacteria or other contaminants.

Recently the National Park Service (NPS) submitted a request to the ADEQ to list three tributaries (Mill Creek, Bear Creek and Upper Buffalo-Newton County-Big Creek) of the Buffalo National River as impaired. The NPS cited data from their data collection program and from the





US Geologic Survey's automated data collection stations at Carver (USGS 07055814) and Bear Creek (USGS 07056515). This past January 2016, ADEQ posted a list of impaired streams on the agency's website and two streams (Upper Buffalo-Newton County-Big Creek and Mill Creek) were not listed as impaired.

As stated on their website, ADEQ assesses water quality monitoring data from numerous locations around the state and utilizes a comprehensive assessment methodology to determine which waters are not meeting their designated uses or water quality standards as listed in Regulation No. 2, but nowhere in Regulation 2, in the latest version of Integrated Water Quality Monitoring and Assessment Report, or in the proposed draft 2016 Assessment Methodology, does ADEQ provide a detailed description of this comprehensive assessment methodology (i.e., sampling methods, frequency, quality assurance/quality control, data evaluation, and statistical methods used) to determine if a stream is impaired or not. Because there is no regulatory, policy, or guidance document that provides adequate details on the analysis or methodology used, it is impossible for the public to understand the decision process by the ADEQ in determining whether a stream should be impaired or not.

For these reasons, I am requesting that ADEQ:

1. Draft a public document that specifies in detail the data used, the QA/QC review, sampling methodology, statistical analysis, and threshold decision that is made to determine if a water body is impaired;





2. Identify within Regulation 2 where the methodology and assessment tools are located. If they are not present, then begin the process of incorporating these methodologies and analysis into the regulatory framework;
3. Develop Memorandums of Agreement/Understanding (MOA/MOU) with tribes, state universities, other institutions, citizen science programs, non-profits, and the federal government that routinely collect water quality information. An information packet could be developed that provides these entities with details that specifies the instrument, collection and handling methods, holding times, QA/QC protocols and data sharing time frames in order to expand the limited water quality information available to the state;
4. Comply with all EPA guidelines and decisions in order for the state of Arkansas's 303-d list be approved every 2 years by EPA;
5. Upon request, provide the dataset used to assess a stream segment at least 10 days prior to the deadline for comments on the 303-d list of impaired streams;
6. Implement models that incorporate high quality, continuous data in their analysis. As part of this process, identify all sub-sampling protocols, new methodologies or assessment practices, and specify a date when these data will be incorporated into the 303-d analysis.

The collection of high quality, continuous data can be expensive. ADEQ stated in the latest version of Integrated Water Quality Monitoring and Assessment Report that agencies are solicited for data to aid ADEQ in its evaluation of the uses of the States waters, so ADEQ should





be aware that in May 2014, the USGS installed an automated data collection gage on Big Creek-Newton County at the Carver Bridge. The National Park Service is paying a great deal of money to the USGS to collect information. The data station collects a suite of information including continuous Dissolved Oxygen (DO) measurements at 15 minute increments. These data provide a robust unbiased data set that greatly increases the precision and accuracy of water quality information compared to other streams in the State. These data indicate that low DO levels tend to occur in the middle of the night when photosynthesis is absent. Currently the standard monthly DO sampling is conducted during the daytime hours only, biasing the results that may mask a significant and chronic nightly occurrence of low DO. Based on a conversation with ADEQ staff in February, ADEQ apparently does not have a model that is compatible or can incorporate a large data set such as the USGS information collected at the Big Creek site. ADEQ could consult with other state agencies, such as Washington State, that routinely use automated data collected to evaluate its state water quality. With the assistance from other states that have implemented these types of programs, a robust assessment (using the USGS data) could be undertaken to determine whether or not this stream is impaired with respect to DO and other pertinent and available data.

The Buffalo National River is listed in the highest category of protection in this state-- Extraordinary Resource Waters and should have top priority for any state actions that need additional data collected, investigations or analysis. The underlain karst geology of the area makes the Buffalo River and other NW Arkansas streams particularly susceptible to groundwater contamination. Given the increased vulnerability and its national prominence, the state should use a pre-cautionary approach when evaluating the Buffalo National River's water quality and err on the side of conservation.





In closing, the public is well aware of unfortunate and recent examples, such as Flint, MI, Toledo, OH, and the Dan River in NC, where state and federal agencies did not conduct an adequate assessment or analysis to detect or prevent tragic incidents that poisoned our people and polluted our rivers. The public should be well informed, understand how decisions are made, the criteria used, and actions taken or planned to be taken to protect our economically and environmentally valuable resources. Please provide transparency and accountability to the people of Arkansas and protection to water resources in our state.

Sincerely,

Teresa A. Turk
Fellow, Buffalo National River
National Parks Conservation Association





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Sincerely,

A handwritten signature in black ink that reads "Teresa A. Turk". The signature is written in a cursive style with a large initial "T".

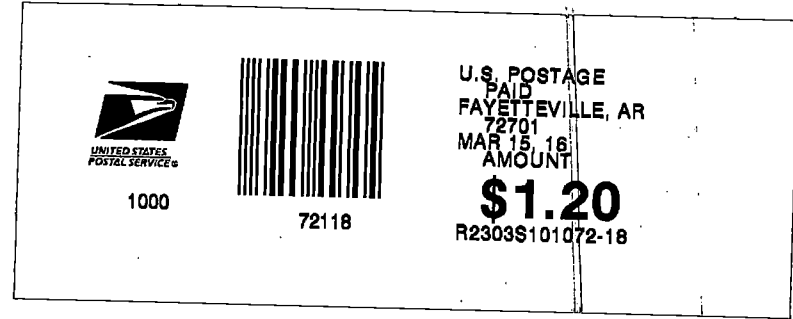
Teresa A. Turk

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IMPAIRED WATER BODIES

