Please find attached comments submitted on behalf of the Buffalo River Watershed Alliance regarding proposed revisions to AIM and CPP. Thanks for the opportunity to comment.

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BUFFALO RIVER WATERSHED ALLIANCE

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Secretary Becky Keogh Department of Energy and Environment 5301 Northshore Drive North Little Rock, AR 72118

October 2, 2020

Dear Secretary Keogh:

Thank you for the opportunity to provide comments on the Continuing Planning Process (CPP) and Anti-Degradation Implementation Methodology (AIM). We hope these recommendations from the Buffalo River Watershed Alliance (BRWA) will be helpful and will be incorporated into the final document. In light of climate change and the Arkansas's second largest industry-tourism-a precautionary approach should be overarching principle throughout the state's water quality standards including the CPP and AIM.

Comments on the CPP:

1. Total Phosphorous (Section 4.15.6)

In Section 4.15.6, the CPP identifies which types of facilities are required to collect data when applying for a permit to discharge nutrients into a listed 303(d) stream. Any large concentrated animal feeding operation (CAFO) under Regulation 5 or Regulation 6 should be required at a minimum to collect water quality data on nutrients (Phosphorous and Nitrogen), develop a water quality monitoring plan approved by DEQ and be required to provide a report containing the water quality monitoring information and data on an annual basis.

BRWA recommends the inclusion of CAFOs as a facility required to collect and annually report water quality and nutrient discharge information.

2. Consistent Use of Statistical Methodology (Section 4.5, 4.15.11)

In Section 4.5 references the use of geometrical means to evaluate effluent discharges. Yet in other sections (5.5.2) the arithmetic mean is used to calculate effluent concentrations. Geometric means reduce the impact of outlier values and the variability of samples. Storm water events are known to produce the highest levels of E. coli levels in streams due to run off. The use of a geometric mean provides a false (lower) average for the pollutant or nutrient of interest because it reduces the statistical impact of these important ecologically influential events especially given the high variability in the dataset.

In the Minerals section 4.15.11.1 (Small streams less than 7Q10 less than 100 cfs) the arithmetic mean is used but for large streams (7Q10 greater than 100 cfs) the geometric means is used in

calculations. Without explanation, there is inconsistency in the methodology. The arithmetic mean is much better tool to reflects the water quality condition.

BRWA recommends the use of arithmetic mean to best characterize effluent discharge and other water quality parameters including minerals.

3. Chapter 5

Chapter 5 identifies guidelines for a permit engineer to consider when establishing a monitoring and sampling program. It is unclear in the document if the permit engineer is a DEQ employee or an employee of the organization seeking a permit. The permit engineer reference needs to be clarified within the document. The CPP guidelines are minimal and provide insufficient oversight of these activities. DEQ including the Water Planning Branch should review and approve all components of the monitoring and sampling for the permittee, including but not limited to, monitoring locations, frequency, sample types, sample analysis, and representativeness of the sampling and monitoring programs.

BRWA recommends extensive DEQ oversight and approval in monitoring and sampling plans.

Comments on the AIM:

General Comments:

- A second comment period for the AIM should be provided to the public due to the interconnectivity between the AIM and Regulation 2. At present the final Regulation 2 rule has not been finalized or published. Therefore, the AIM comments below should be considered preliminary because final language in Regulation 2 is not available.
- Throughout the draft AIM, reference is made to the Waters of the US (WOTUS). WOTUS is a moving target to litigation and varying decisions from the courts. The AIM should reference Waters of the State (WOTS) for consistency and relevance to our state streams especially in fragile karst areas.
- As discussed in the stakeholder working group meeting, the AIM is a requirement under the Clean Water Act (CWA) that should be incorporated into regulation and binding to all parties, not reference as a guidance document.
- Any future Nutrient Trading program (including Point Source and Non-Point source trades) should be required to follow all AIM procedures (e.g., Tier Protection Levels) regardless of whether an NPDES permit is required or not.

Specific Comments:

1. <u>Definitions: Outstanding Resource Waters (ORW)</u>: The definition of an ORW should be expanded to include the tributaries and ephemeral streams that contribute to "...the high-quality waters constitute an outstanding state resource with significant aesthetic, recreational, or scientific value". A river is the sum of its parts. Without protection of the

upstream regions of an ORW, the probability of activities that may degrade the stream is very high. Due to the recreational and economic activities that are dependent upon maintaining ORW, DEQ should increase protection of the ORW by including all upstream tributaries and ephemeral streams in the ORW designation.

- 2. <u>Baseline Water Quality (BWQ)</u>: BWQ data collection should be calculated on every stream in Arkansas as soon as possible. DEQ has a wealth of data collected from over 150 streams during the past 30 years in addition to federal and non-profit partners who have added to the dataset. The ecoregion water quality information collected during the 1980's and 1990's on the most pristine streams in the region should be used as the baseline (as it was in the initial design) to establish the parameters of healthy streams. These data in conjunction with more recent information should be used to establish BWQ for streams in the state.
- 3. <u>Nonuse of narrative standards in establishing BWQ</u>: Currently the AIM is only applicable to numeric criteria and does not incorporate parameters where only narrative criteria are established. This is a serious oversight and gap in the AIM. Nutrient pollution is a rapidly increasing problem that DEQ continues to deny and delay any progress on implementing numeric nutrient criteria for phosphorous and nitrogen. As long as DEQ continues to delay and not provide relevant numeric criteria as is provided by adjacent states OK and MO, maintaining water quality in AR will continue to be seriously jeopardized. Further, by the AIM not considering the impacts of these nutrients, it does not provide an accurate review process for establishing BWQ nor identify pollutants that may cause serious degradation of aquatic life and stream ecosystem health.
- 4. <u>NPDES permittees should not be grandfathered into the AIM.</u> Prior to any new or existing NPDES permit renewals, a BWQ should be calculated well in advance of the permit deadline to allow for sufficient review and consideration by DEQ. No new or existing permits should be granted without a BWQ. The assimilative capacity of all current and previous activities should be calculated as pollutant contributions and count against assimilative capacity. The baseline information for establishing BWQ should be from the ecoregion pristine streams (see recommendation #2).
- 5. <u>Non-point source pollution</u>: Under EPA's Water Quality Standards Handbook, it states that that non-point activities are not exempt from the provisions of the anti-degradation policy. The policies and regulations noted by DEQ in Chapter 9 are ambiguous and insufficient in protection of Arkansas' water quality standards. This has been illustrated by the increasing frequency of Harmful Algal Blooms (HABs) throughout the state and in many cases from nutrient run-off associated with CAFOs. Separate "controlling" state agencies apart from DEQ regulate potentially degrading activities. How will DEQ oversee, track, and coordinate with other state agencies to ensure protection of existing designations and ensure high quality waters are not degraded?

6. <u>Temporary lowering of water quality:</u> The temporary lowering of water quality in a ORW should be extensively reviewed and determined to be the last available option after all others have been rejected by a reasonable standard. The term "temporary" should be consistent with EPA's understanding of temporary to mean a matter of weeks or a few months, certainly not years. An extensive public review process including a public comment period and public meeting should also be required of DEQ for agency transparency in the public forum.

Section 5 (b) documents a list of factors to be considered when assessing the lowering of water quality. The additional factor should be considered: The effect of this action on low income, ethnic, or racial, or any other class of people that would be adversely impacted by this decision. The socio-economic analysis should be conducted by a credentialed environmental economist not employed by DEQ to fully examine and draft a report that details the costs and benefits associated with the significant degradation of water quality.

7. <u>Safety Margin for Assimilative Capacity:</u> Climate change, imperfect models, and high variability in water quality parameters and conditions all contribute uncertainty. The goal of the CWA is to maintain and preserve high quality waters. Given the many uncertainties in modeling and high variability in predicting and assessing natural systems, no less than a 20% safety buffer should be incorporated into each stream's assimilative capacity estimate. The precautionary principle should be a core value and an overarching goal of DEQ to guarantee clean waters for Arkansans and the tourism sector.

Thank you for the opportunity to comment. Gordon Watkins, President Buffalo River Watershed Alliance

cc: Russell Nelson, EPA

Maria Martinez, EPA