

From: Colene Gaston [<mailto:cgaston@bwdh2o.org>]

Sent: Monday, October 31, 2016 4:26 PM

To: am-comments

Cc: Barnett, Mary; Wentz, Tate; Wise, Jim; Clem, Sarah; Osborne, Caleb; Alan Fortenberry; Larry Lloyd; Robert Morgan; Ray Avery; Darcia Routh,; Jeff Stone,; Terry Paul,

Subject: Assessment Methodology for 2018

Mary Barnett

ADEQ Water Quality Planning Branch

Office of Water Quality

Arkansas Department of Environmental Quality

5301 Northshore Drive

North Little Rock, AR 72118

Dear Ms. Barnett:

Beaver Water District (BWD) commends the Arkansas Department of Environmental Quality (ADEQ) for initiating a process that for the first time allows for public participation in the development of the Assessment Methodology that will be used in the preparation of the State's List of Impaired Waterbodies prepared pursuant to section 303(d) of the Clean Water Act (CWA), beginning with the 2018 proposed 303(d) List. In response to ADEQ's request for input to present to a stakeholder workgroup, BWD offers the following general suggestions:

- 1.** The traditional rule of thumb for pollutants other than toxic pollutants (which may require a more stringent assessment methodology) has been that a water body is in non-attainment when more than ten percent (10%) of measurements exceed the water quality criterion (WQC). Possible exceptions to the ten-percent rule would be when the WQC is expressed as an instantaneous maxima (or minima) not to be surpassed (or gone below) at any time or when the WQC is expressed as an average concentration over specified times. In those instances where ADEQ departs from the ten-percent rule, BWD suggests that ADEQ provide the scientific justification and rationale for doing so in the Assessment Methodology. In addition to providing this information as to specific WQC, BWD recommends that the introductory section of the Assessment Methodology describe ADEQ's decision rules and associated rationale for different types of pollutants (*e.g.*, toxic, conventional, and non-conventional pollutants) and types of standards (*e.g.*, acute versus chronic criteria for aquatic life or human health).
- 2.** The public often assumes that the WQC in Arkansas Pollution Control and Ecology Commission (APCEC) Regulation No. 2 (hereinafter, "Reg.2") are instantaneous maxima or minima to be applied at all times, unless explicitly stated otherwise. In the process of preparing the Assessment Methodology for 2018, BWD encourages ADEQ to make note of where revisions to Reg. 2 are needed to clarify how and when a WQC applies and to address such instances in the next triennial review of Reg. 2.
- 3.** BWD believes that it should not be easier to delist a waterbody than it is to list it. This appears to be the case with the 2016 Assessment Methodology for, among other things, the narrative nutrient criteria as applied to wadeable streams and rivers. The Assessment

Methodology regarding each parameter should be reviewed to make certain that the Delisting Methodology is at least as stringent as the Listing Methodology.

4. Consideration should be given to the inclusion of an assessment methodology for the narrative nutrient criteria as applied to waterbodies other than wadeable streams and rivers. Also, there needs to be a definition of “wadeable.”
5. In the 2016 Assessment Methodology for the narrative nutrient criteria as applied to wadeable streams and rivers, there is a three-prong test for listing. The first prong involves comparison of the total phosphorus (TP) and total nitrogen (TN) concentrations of a particular monitoring segment to the *seventy-fifth* percentile of TP and TN data from *all* wadeable streams in the ecoregion. The seventy-fifth percentile should be used as a benchmark only if the data used is taken from *pristine reference streams* in the ecoregion. In the absence of data from true reference streams, the *twenty-fifth* percentile of the data from all wadeable streams in the ecoregion should be used as the benchmark.
6. The 2016 Assessment Methodology for the bacteria criteria allows, in general, a twenty-five percent (25%) exceedance of an applicable criterion. BWD suggests that ADEQ examine the rationale for this departure from the ten-percent rule and refer to current U.S. Environmental Protection Agency recommendations regarding water quality criteria and assessment methodology for bacteria.
7. BWD recommends that the 2016 Assessment Methodology for nutrients for Beaver Lake, which allows the growing season mean Chlorophyll-a criterion to be exceeded two out of five years (*i.e.*, forty percent (40%) of the time) and the annual average Secchi Transparency criterion to be exceeded two out of five years, be evaluated to ensure that the Assessment Methodology is sufficiently protective of the drinking water use. Consideration should be given to clarifying the assessment methodology to provide for a finding of non-attainment when the total number of yearly excursions of the Chlorophyll-a or the Secchi Transparency criteria combined are three or more in a five-year period. Consideration should also be given to including an absolute maximum concentration for Chlorophyll-a in a given year.
8. BWD suggests that ADEQ release its 2018 draft 305(b)/Integrated Report simultaneously with a its 2018 proposed 303(d) list for public review and comment, and that it include a brief narrative justification for any proposed new listing or delisting of a stream segment and for the addition or removal of any individual water quality parameter.

Please contact me if you have any questions. BWD looks forward to participating in the stakeholder process.

Sincerely,
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