



## **SCWQA Comments on Draft 2018 303(d) List of Impaired Waters February 2019**

In December, the SCWQA submitted comments on DHEC's Draft 2018 303(d) List and Integrated Report of Impaired Waters. Our comments requested additional resources and the publication of numerous documents that would allow stakeholders to better evaluate DHEC's data and listing methodology. A summary of those comments is provided below.

**QAPP availability and compliance certification.** The draft listing methodology makes several statements on regarding "a SCDHEC-approved Quality Assurance Project Plan (QAPP)," DHEC's EPA-approved "Quality Assurance Management Plan (QAMP)," DHEC's "criteria for quality assurance," and a "checklist of QA/QC considerations" used by DHEC. The methodology then includes a link to a DHEC webpage with several documents, none of which clearly line up to the description in the listing methodology. We requested clarification of the listing methodology to provide direct links to specific documents being described in the methodology so that we may evaluate whether the quality assurance procedures are appropriate.

**All data used to support a 303(d) listing should be publicly available.** In order to make the public comment period meaningful, DHEC must make the data supporting each listing available to the public. At a minimum, such data should be available from the outset of the comment period. Even better would be to post such data as they are available – well ahead of the comment period. Such availability is critical to allow stakeholders a meaningful opportunity to evaluate DHEC's available data with an eye toward correcting errors, filling any data gaps, or to collect additional data where more data will better help determine the water body's true attainment status. We also stated that DHEC's website should indicate the source and quality of all data provided (i.e., name of state agency, private party, etc., that collected the data and certification regarding QA/QC procedures). Underlying information about biological sampling also should be made available.

**Qualified data should be disclosed and explained.** DHEC should identify any data that are qualified and the nature of the qualification. Qualified data should not be the sole basis for any listing decision nor should qualified data be relied upon if the inclusion of such data is what triggers an impairment determination.

**DHEC should explain its treatment of non-quantified data.** We are unclear whether DHEC uses any data which are found to be below applicable quantitation levels. We believe that data below practical quantitation limits should be assigned values of "0" for listing purposes. We questioned what DHEC's procedure is in relation to such data.

**For each new 303(d) listing, DHEC should highlight listing and prepare data fact sheet.** Given the potential impacts a new listing can have on NPDES permit holders as well as land owners within or upstream of waters declared to be impaired, we requested that all new listings be readily

identified for ease of identification and analysis. For DHEC to really make public review and comment meaningful, it should prepare an electronic fact sheet for each new listing.

**Minimum of 10 samples for listings based upon the 10% or 25% criteria.** We concurred with DHEC's position that "no monitoring site will be listed as partially or not supporting for any pollutant based on a single water chemistry sample result because of the possibility of an anomalous event." However, we believe it is inappropriate to list a water body as impaired without appropriate data to support the decision. In particular, when "the sampling frequency employed in the ambient monitoring network is insufficient for strict interpretation of the Standards," the decision must be to collect sufficient information to satisfactorily interpret the Standards, not to find impairment. DHEC should modify its listing methodology to specify that listing decisions will only be made where at least 10 valid samples are available for all pollutants where compliance will be judged by the 10% and 25% criteria. The chances of a false positive or non-representative sampling condition are far too high to make a listing determination based upon fewer than 10 data points. Waters with one high data result out of fewer than 10 data points should be put in a category for additional data collection during the next listing cycle.

**No listing based on single fish community or benthos sample unless impairment is severe.** Like water chemistry samples, no stream should be listed as having an impaired fish community or benthos based upon a single stream survey (unless the survey results demonstrate impairment beyond reasonable dispute). In particular, stream surveys showing marginal impairments are not a proper basis to solely support a listing.

**DHEC must reject one-in-three-year listing criterion for toxicants.** Regarding the criterion for "toxicants (heavy metals, priority pollutants, chlorine, ammonia)," SCWQA recommended that the "exceeded more than once in three years" criterion be replaced with a "greater than 10%" criterion. The ">1-in-3" methodology, rooted in an unpromulgated EPA policy that is not binding on DHEC, is problematic because it accounts for neither the existence of false positives nor the importance of sample size or data quality. The extraordinarily over conservative >1-in-3 methodology would require a finding of impairment whether two exceedances in a three-year period are out of a total of two samples or two hundred samples, even though the latter would be much less likely to indicate truly impaired ambient conditions. A "greater than 10%" criterion, coupled with a minimum of 10 samples, is simply a better and more technically appropriate methodology.

**Discretion to consider factors other than excursion magnitude and frequency should be prohibited from justifying findings of impairment.** SCWQA agrees that DHEC should have discretion to consider factors other than excursion magnitude and frequency when making determinations of impairment status for toxicants. However, we believe the exercise of such discretion should be limited where it is exercised in favor of erring against a finding of impairment. Because an impairment determination generally is based on the conclusion that existing effluent limits are not sufficiently stringent, findings of impairment should be made only when the results cannot be explained away by confounding factors.

**If *E. coli*/Enterococci impairment is based in part on fecal coliform data, then impairment description should reflect that reliance.** Although SCWQA does not oppose the use of historic fecal coliform data to augment insufficiently available *E. coli* and Enterococci data in order to make impairment determinations, locations determined to be impaired using fecal coliform data should be listed as impaired due to *E. coli*/Fecal Coliform and Enterococci/Fecal Coliform, respectively. This is because it is possible that locations could be impaired under a Fecal Coliform standard but not under an *E. coli* or Enterococci standard, and omission of the reliance on Fecal Coliform data risks a misinterpretation of past findings of impairment.

An alternative approach to handling instances where both Fecal Coliform and *E. coli*/Enterococci data are available for a given location would be to examine the ratio between Fecal Coliform and *E. coli*/Enterococci colonies, which would allow an approximation of *E. coli*/Enterococci colonies at that location using historical fecal coliform data. However, it is simply inaccurate to suggest that a water body is impaired for *E. coli* or Enterococci when insufficient *E. coli*/Enterococci data exists to make that determination.