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Working to Protect, Restore, and Celebrate Kentucky's Waterways

www.KWAlliance.org

August 6, 2021

Water Quality Branch
Kentucky Division of Water
300 Sower Blvd., 3rd Floor
Frankfort, KY 40601

SENT VIA ELECTRONIC MAIL to water@ky.gov

RE: KWA Comments on the 2021 Triennial Review

Dear Sir or Madam:

Kentucky Waterways Alliance, Inc. (KWA) is committed to working with the Division to protect and maintain the water quality of the Commonwealth's waters. KWA is a statewide nonprofit organization dedicated to protecting, restoring, and celebrating the waters of the Commonwealth. KWA represents members and affiliate organizations united to ensure that the people of Kentucky and our wildlife have high quality water resources. We share your mission to protect and restore the designated uses of Kentucky waterways so that all our fellow Kentuckians may have recreational activities such as swimming, boating, and fishing as well as reliable drinking water supplies. The water quality and habitat of our waterways should also protect our diverse aquatic biodiversity.

As described in the Division's public notice and listening session, the topics for the current Triennial Review are as follows.

- Updating criteria for aquatic life for ammonia
- Establishing aquatic life criteria for aluminum
- Updating human health criteria for 94 pollutants
- Designating new Outstanding State Resource Waters (OSRW) and Exceptional Waters
- The Division has also invited comments on additional water quality topics not listed in the notice.

We offer the following comments in response to the Division's request for comments on revised regulations (401 KAR 10:001, 10:026, 10:029, 10:030, and 10:031) as a part of the triennial review of Water Quality Standards.

401 KAR 10:001- Definitions for 401 KAR Chapter 10

KWA has seen no specific changes or updates proposed in 401 KAR 10:001.

401 KAR 10:026 - Designated Uses of Surface Waters

The Division has proposed addition of new Outstanding State Resource Waters (OSRWs) and Exceptional Waters. KWA commends the Division for continuing to monitor the Commonwealth's waters and designate new OSRWs and Exceptional Waters as warranted. Our work over the past 25 years with the Division as well as the past decade of work with US Fish and Wildlife Service, Kentucky Department of Fish and Wildlife and the US Forest Service has helped to identify some of the watersheds/stream reaches proposed for additional protection. We offer our general support for these new OSRW and Exceptional Water designations and look forward to commenting further after reviewing specific waterbodies proposed.

401 KAR 10:029. General Provisions

KWA has seen no specific changes or updates proposed in 401 KAR 10:029.

401 KAR 10:030. Antidegradation Policy Implementation Methodology

KWA has seen no specific changes or updates proposed in 401 KAR 10:030.

401 KAR 10:031. Surface Water Standards

- **Updating criteria for aquatic life for ammonia**

Kentucky's rivers and streams support incredible biodiversity including many threatened and endangered species. Indeed, Kentucky waters are some of the richest in the nation. Our world-class mussel fauna are a critical part of our state's biodiversity. KWA continues to work with partners through the Kentucky Aquatic Resource fund to support the reintroduction of many native mussel species into Kentucky waterways. Adoption of the EPA recommended criteria, developed with sound science over many years, is a critical step in the protection of our mussels and other aquatic life.

Ammonia is a component of nitrogen pollution and exerts oxygen demand in waterways that is harmful to aquatic life. But it is also directly toxic to aquatic life, especially mussels and aquatic snails. In the last Triennial Review in 2018-19, KWA disagreed with the Division's proposal not to adopt the 2013 and we are pleased to see that the Division is adopting this standard finally.

The presentation provided by the Division specifies standards when sensitive mussel species are present. KWA supports applying the standards to all waterways in Kentucky because our mussel fauna are widespread, not fully inventoried, and so important to our waterways health. Additionally, the distribution of sensitive aquatic snail species is not well documented in Kentucky. It would be most protective to apply the standard to all waterways with a process to evaluate petitions from dischargers for exemption if their studies, as confirmed by state and federal agencies, show the absence of sensitive species at all life stages.

The public listening session presentation also proposed the possibility of an allowance for a compliance schedule in a discharge permit if the discharger could not immediately meet the new ammonia limits. The proposed change would include an enforceable sequence of actions or operations leading to compliance with ammonia effluent limitation as soon as possible but allows for a schedule of more than one year. If dischargers are violating this standard at this late date, well after the criteria have been

developed to show serious toxicity, there has already been serious damage to our aquatic life in the receiving waterways. KWA opposes allowance of compliance schedules in nearly all cases and would expect the Division to limit the time period to no more than six months.

- **Establishing aquatic life criteria for aluminum**

The Division has proposed adoption of USEPA's 2018 recommended criteria for aluminum. KWA supports this change to protect fishes and other aquatic life from the toxic effects of this element. The Division's presentation mentions use of an EXCEL Macro that factors in dissolved organic carbon, total hardness, and pH in setting the standards. KWA understands that these factors affect the bioavailability of aluminum to aquatic life and approve of their use. However, we would expect to see rigorous monitoring and conservative assumptions used to develop the ranges of these water quality factors which have a great effect on the resulting aluminum standard.

- **Updating human health criteria for 94 pollutants**

In the Division's public presentation, it was proposed that human health criteria for 94 pollutants would be modified by using new factors as follows:

- body weight = 84.7 kg (Kentucky average, age 18+)
- drinking water ingestion = 2.4 L/day,
- fish consumption rate = 22.8 g/d (Inland South value)

The Division has also proposed the possible use of static or probabilistic approach. KWA is generally in support of these changes, but may make additional comments as more information is provided in the specific proposal from the Division.

- **Additional criteria not proposed**

Although not proposed for this Triennial review, KWA wishes to reiterate here our request that KDOW propose numeric nutrient criteria for Kentucky waterways to address a serious and growing water quality issue. The Division has recently reported monitoring results showing increased loading rates for both nitrogen and phosphorus in your *Update to the 2019 Nutrient Loads and Yields in Kentucky Study* report.

KWA is open to proposals on how to address nutrient pollution, including partial criteria for certain waters and the use of indicator measures like microcystin or chlorophyll *a*. But we must not delay any longer in addressing a problem that will only get worse and affect more waters, especially as climate change effects continue to exacerbate the impacts.

Summary and Closing

In closing, we support many of the changes DOW has proposed, but have some specific recommendations on the proposals and may have more comments as we see more specific proposals expected to be presented to the public soon.

KWA has also proposed that the Division no longer neglect to address in water quality standards the serious and growing threat of nutrient pollution.

Thank you for your time and consideration. If you have any questions regarding our comments, please do not hesitate to contact me. My email is director@kwalliance.org and direct telephone is (502) 648-2891.

Sincerely,
KENTUCKY WATERWAYS ALLIANCE

A handwritten signature in black ink, appearing to read "Ward G. Wilson". The signature is fluid and cursive, with the first letters of the first and last names being capitalized and prominent.

Ward G. Wilson, P.E., BCEE
Executive Director