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*Working to Protect and Restore Kentucky's Waterways*

[www.KWAlliance.org](http://www.KWAlliance.org)

VIA ELECTRONIC MAIL via [water@ky.gov](mailto:water@ky.gov)

June 6, 2018

ATTN: Carole Catalfo, Esq.  
Internal Policy Analyst, RPPS  
Division of Water  
300 Sower Blvd., 3NW 36WK  
Frankfort, KY, 40601

RE: 2018 Triennial Review

Dear Ms. Catalfo,

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 insure high quality water resources in Kentucky for diverse recreational activities such as swimming, boating, and fishing as well as reliable drinking water supplies and for the protection of our diverse aquatic biodiversity.

KWA attended one of the DOW's recent listening sessions in Frankfort to provide feedback to the agency on the topics being considered for the 2018 Triennial Review. We offer the following comments in response to the Division's request for input as a part of the triennial review of Water Quality Standards.

We understand that the Division is seeking comments on the following:

- Adopting EPA Aquatic Life Criteria for Ammonia (2012), Cadmium (2016), and Carbaryl (2012)
- Adopting the 2015 EPA Human Health Criteria for 94 pollutants modified for Inland South fish consumption rates
- Adopting EPA Primary Contact Recreation Criteria for *E. coli*
- Adopting Combined Sewer Overflow (CSO) wet weather provisions consistent with the EPA 1994 CSO Control Policy
- Allowing use of EPA 2007 Aquatic Life Copper Biotic Ligand Model for site specific copper criteria
- Designating fifty-two (52) new Outstanding State Resource Waters and establishing twenty-nine (29) new Exceptional waters

We will comment on each topic below and offer additional suggestions for inclusion in the revision of water quality standards.

## **Designating fifty-two (52) new Outstanding State Resource Waters and establishing twenty-nine (29) new 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 are especially pleased to support the designation of new watersheds that provide habitat for the Kentucky Arrow Darter. We offer our unconditional support for these new OSRW and Exceptional Water designations.

## **Adopting EPA Aquatic Life Criteria for Ammonia (2012), Cadmium (2016), and Carbaryl (2012)**

Our 2015 comments on the Triennial Review made clear our support for the adoption of the 2012 EPA Aquatic Life Criteria for Ammonia. We are pleased to offer support for the adoption of this criteria in the 2018 Triennial Review. 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. Mussels are especially sensitive to ammonia and additional protection for these important aquatic species is needed.

KWA continues to work with partners through the Kentucky Aquatic Resource fund to support the reintroduction of many native species into Kentucky waterways. Adoption of the EPA recommended criterion, which was developed and with sound science over many years is a critical step in the protection of our rich heritage of biodiversity.

Likewise, we support the adoption of the proposed criterion for both Cadmium and Carbaryl recommended by EPA after years of scientific studies to support the derivation of aquatic life limits.

## **Adopting the 2015 EPA Human Health Criteria for 94 pollutants modified for Inland South fish consumption rates**

As stated above, we support adoption of EPA's recommended criteria unless we have specific studies that support a more protective Kentucky derived criterion. Thus, we support the adoption of new human health criteria and the Inland South fish consumption rates, which assume an increase in fish consumption.

## **Adopting EPA Primary Contact Recreation Criteria for *E. coli***

We support adoption of EPA's updated primary contact recreation criteria for *E. coli* and suggest the same interval as proposed by USEPA: 30 days.

## **Adopting Combined Sewer Overflow (CSO) wet weather provisions consistent with the EPA 1994 CSO Control Policy**

While we understand the Division can adopt wet weather provisions under certain circumstances, we urge caution. Further, we ask that any changes be consistent with the Long Term Control Plan (LTCP) guidance and that there be robust, full, open public participation in the process of developing the standards and a 60 to 90-day comment period on any proposed changes.

By law, discharges that remain after full *implementation* of the LTCP must not interfere with the attainment of water quality standards. Therefore, the LTCP must not only be approved it must be fully implemented prior to any use designation change request. Further, the CSO entity must be in full

*compliance* with their LTCP prior to any designated use changes. This change would also entail post-construction compliance monitoring to demonstrate attainment of water quality standards.

The adoption of a CSO subcategory of recreational uses would lower the level of protection for the water body and therefore EPA regulations at 40 CFR 131.10(j) require a Use Attainability Analysis (UAA) for every stream segment that will be downgraded. The UAA must be submitted to the public for comment and to EPA for approval and must conform to the requirements set forth in 40 CFR 131.10(j). Any UAA that downgrades uses should have a public notice and opportunity for a public hearing in the impacted communities and not only in Frankfort.

Such a subcategory that allows for a use that is less protective than swimming every day during the recreational season should only be considered when a CSO entity has proven full implementation and compliance with the approved LTCP and when attainment of the primary contact recreation use at all times would cause substantial and widespread economic and social impact. How long the recreational use would be suspended and what other water quality criteria will apply during these events should be decided on a case-by case basis. Such a suspension should be approved for the shortest time necessary to protect public health and a plan to notify the public of the dangerous bacteria levels should require public input and KDOW approval. At a minimum, bacteria criteria that protects any drinking water use must be maintained and criteria that protect secondary contact recreational uses (SCR) should be retained if possible.

Finally, we would anticipate that KDOW would clearly define any new CSO designated use and the applicable criteria and identify all CSO receiving waters in a table in KAR 401 10:026. This will help make the process transparent to the public as well as the regulated community.

#### Suggested New Use for Urban Streams

If the state does move forward with the adoption of a CSO subcategory of recreational uses, consideration should also be given to a new use category to protect children in urban areas who frequently splash in waters that otherwise would be considered too shallow for adults.

#### Existing Uses

If the recreational or aquatic life use is an existing use then no changes or downgrades are permitted. States may not change a use if the use is an existing use or the use can be attained by implementing effluent limits required under sections 301(b) and 306 of the CWA and by implementing cost-effective and reasonable best management practices for nonpoint source controls (40 CFR 131.10(h)(2)).

How will KDOW and/or the CSO community involve the public to determine if the use is an existing use? KWA urges a specific public notice and opportunity to comment in each community and near each stream reach where the new CSO use would apply to assure that existing uses are protected and the public is both informed and involved in the process.

#### Special Use Waters

If the water body is a special use water (Cold Aquatic Habitat, OSRW, Exceptional Water, Reference Reach) the Division should assure that no downgrade is approved and require the CSO entity to meet all current water quality standards to protect the use.

## **Allowing use of EPA 2007 Aquatic Life Copper Biotic Ligand Model for site specific copper criteria**

KWA has no comment on this proposal.

## **Changes to the Selenium Criteria for Aquatic Life**

We support the adoption of the EPA's recommended criteria of 11.3 mg/kg dry weight for fish fillet and removal of current egg/ovary criteria. As per our 2015 comments we note, concern with moving completely to a fish tissue criterion, which is extremely difficult to enforce. Further, we urge the Division to retain the current water column standard. A water column standard is important for citizen testing and enforcement of the Clean Water Act particularly when fish are not present for testing.

## **Other Topics of Concern for Consideration**

### Nutrient Criteria

KWA requests DOW propose numeric nutrient criteria. KWA is open to proposals on this, including partial criteria for certain waters, and to the use of indicator measures like microcystin or chlorophyll-a rather than total phosphorus and total nitrogen. KWA has continuously pushed for numeric nutrient criteria. The last few years have illustrated our concerns, with the Corps of Engineers finally initiating monitoring of algae in their flood control reservoirs, and subsequently finding harmful algae blooms in many of those reservoirs. Additionally, "nutrient/biological indicators" remains a top cause of impairment to waters in the state, as noted by the 2016 Integrated Report on Water Quality. It is clear that nutrient pollution continues to be a problem.

DOW has spent over a decade collecting data, monitoring, and assessing streams for nutrient issues, and the agency has continued to cite incomplete data as rationale to postpone numeric criteria. This bears out in the states Numeric Criteria Development reports to the EPA, which have postponed numeric criteria proposals from 2008 to 2011 to 2014/2015, and now, again in 2018. KWA supports having sound science to make decisions that may affect our communities, but as DOW continues to delay action, our streams and lakes continue to suffer. Many states around Kentucky have proposed at least partial criteria for address nutrient pollution. Kentucky should do the same and at least begin to enact nutrient criteria to protect our waterways.

### Fish Consumption Use

KWA specifically requests DOW adopt fish consumption as an official designated use. For years, DOW has recognized fish consumption as an "implied use." EPA has consistently supported adoption of designated uses in water quality standards because they establish official water quality goals for specific water bodies, communicate these goals to the public, and provide regulatory basis for management actions. Additionally, section 101(a)(2) of the act says that "wherever attainable...water quality provide for the protection and propagation of fish, shellfish, and wildlife, and recreation in and on the water." EPA has said that this includes protection of aquatic life for human consumption—i.e., whether it is "fishable," which EPA interprets to mean "providing for the protection of aquatic communities and human health related to consumption of fish and shellfish."<sup>1</sup> It appears that it would be beneficial to DOW to make fish consumption an actual designated use to reduce ambiguity on clean water protection to the public and to the regulated community.

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[http://water.epa.gov/scitech/swguidance/standards/upload/2000\\_10\\_31\\_standards\\_shellfish.pdf](http://water.epa.gov/scitech/swguidance/standards/upload/2000_10_31_standards_shellfish.pdf)

## WQS for Fracking Water Constituents

KWA requests DOW consider water quality standards for various constituents in fracking wastewater, or flowback/produced water from hydraulic fracking operations. This wastewater can have hundreds of different chemicals and elements. Some of those chemicals are already regulated by DOW or other agencies in some form. However, others are not, and can pose significant threats to water quality and aquatic life.

Why are we concerned? Nitrogen fracking has been ongoing in Kentucky for decades. Hydraulic fracking, though, has only in recent years begun to make its way into the state, and the hydrologic and wastewater impact is an order of magnitude greater than nitrogen fracking. KWA's understanding is that Kentucky does not have surface water standards for radionuclides (only drinking water), sodium, bromide, trihalomethanes, and certain other constituents of fracking wastewater. Though DOW does have regulatory capacity of oil and gas facilities through 401 KAR 5:090, it is limited. Development of additional water quality standards provides better protections for aquatic life and human health from the mounting concerns associated with fracking wastewater.

### **Summary and Closing**

In closing, we support many of the changes DOW has proposed in particular adopting EPA's recommended criteria for water quality. We have serious concerns about a possible new CSO Use Designation and have offered constructive input and suggestions should DOW choose to proceed. And finally, we offer several additional topics for DOW's consideration with special emphasis on the adoption of nutrient criteria.

Thank you for the opportunity to comment. If you have any questions regarding our comments, please do not hesitate to contact me at (502) 648-2891 or [ward@kwalliance.org](mailto:ward@kwalliance.org).

Sincerely,  
KENTUCKY WATERWAYS ALLIANCE



Ward G. Wilson  
Executive Director

cc: Peter Goodmann, Director, Division of Water