



*Via Electronic Mail*

September 18, 2013

Mr. John Hoke  
Water Protection Program  
Department of Natural Resources  
P.O. Box 176  
Jefferson City, MO 65102

**RE: Water Quality Standards Draft Rulemaking 10 CSR 20-7.031  
Missouri Register Volume 38, Number 12, June 17, 2013**

Dear Mr. Hoke:

We would like to express our support for the above-referenced water quality standards rulemaking and we offer the following comments. These comments should be understood within the context of overall support for the rule going forward and are provided to the Missouri Department of Natural Resources (department) as a means of improving its implementation.

**COMMENT 1** – At paragraph (1)(C)1, the proposed rule incorporates by reference the MoRAP Aquatic Gap Project report, *A Gap Analysis for Riverine Ecosystems of Missouri, 2005 Final Report*, into the rule. We support the use of the data from the project to the extent that it is useful in correcting flow lines and assigning habitat uses. However, we do not think that it is advisable to incorporate the entire report. Its primary function is to provide a tool for policy makers in identifying priority areas for conservation. It was not intended to be a regulatory document and has recognized limitations, which are stated in the report, that make it unsuitable for incorporation into a rule.

We fully support the use of the hydrological and other physical data from the Aquatic Gap Project for assigning the appropriate habitat uses. We ask that the rule state specifically that this is the intended data for use.

**Requested change:** Amend (1)(C)1 as follows:

“.....based on watershed size, scale within the stream network, and **other hydrological and physical** data ~~and information~~ contained in the MoRAP Aquatic Gap Project at *A Gap Analysis for Riverine Ecosystems of Missouri, 2005 Final Report*...., ~~which is hereby incorporated by reference and does not include any later amendments or additions.~~”

**COMMENT 2** – Additional refinements to the protection and propagation of fish, shellfish, and wildlife (aquatic life uses) are recommended. The department has greatly improved Missouri’s aquatic life use

framework by providing subcategories of warm water habitat uses at various water body scales within the landscape. The department has proposed five warm water habitat uses in flowing waters, ranging from Headwater to Great River. We strongly support this aspect of the proposed rule and suggest that these ranges be included for cool and cold water habitats as well.

The department also proposed aquatic habitat tiers above and below the general aquatic habitat uses, (i.e., exceptional and modified aquatic habitats). The proposed definition of Exceptional Aquatic Habitat is unclear and could be construed to apply to numerous waters that are more appropriately protected by the general aquatic habitat uses. For example, the Missouri and Mississippi Rivers could fit the current definition; however, we believe that this designation is not the department's intent. Most "exceptional" waters are designated as Outstanding State and National Resource Waters and afforded extensive protections under Missouri's antidegradation policy and implementation procedures. We recognize and support that both Exceptional and Modified Aquatic Habitat uses require use attainability analyses (UAA) prior to designation. However, the department has not yet established critical information (such as definition of reference streams or biological indices) that is needed to determine whether exceptional aquatic habitat use can actually be attained in a water body. Further, a reference to rare or endangered species in the use definition does not seem appropriate as a stream could lack "exceptional" habitat but still support rare or endangered species. Water quality protections for rare and endangered species are better provided for in development of site-specific water quality criteria. We therefore request that the department remove the Exceptional Aquatic Habitat use definition from this rulemaking or provide a better definition and critical information to support that definition.

We request that the final rule include an Ephemeral Aquatic Habitat use. This use category could be applied to all waters of the state that are not assigned General, Exceptional, or Modified Aquatic Habitat uses. While the department included a new classification (Class E) for ephemeral waters, its applicability is uncertain. With respect to Class E or the ephemeral water definition, we request that the department eliminate the reference to a 96-hour period of flow or pooling in response to precipitation events. This change appears to redefine a "permanent" pool as any that exceeds 96 hours. We assume that this period was selected based upon the duration expression for some chronic water quality criteria. However, this duration likely has no relationship to whether a water body would support the diverse aquatic community that the criteria were meant to protect. Application of chronic numeric criteria is inappropriate for such ephemeral watercourses. Rather, these watercourses are appropriately protected through narrative criteria and acute numeric criteria under Sections (4) and (4)(I).

**Requested Change:** Add the following aquatic life use within the framework to cover watercourses that do not maintain perennial flow or permanent pools.

**f. Ephemeral Aquatic Habitat - Waters that do not have permanent surface flow or permanent pools.**

**Requested Change:** Amend (1)(F)7 as follows:

Class E – Streams that do not maintain permanent surface flow or permanent pools, but have ephemeral surface flow or pools ~~less than ninety-six (96) hour duration~~ in response to precipitation events.

**Requested Change:** Include a clear exception for applicability of chronic numeric criteria to these waters in Subsection (5)(A) as follows:

“The maximum chronic toxicity criteria in Tables A and B shall apply to waters designated for the indicated uses given in **the Use Designation Dataset** and Tables G and H, **except for waters designated for Ephemeral Aquatic Habitat.**”

**COMMENT 3** – The proposed designation of presumptive beneficial uses should be modified to provide appropriate protections. The department has made great strides to develop the extent of default designation of aquatic life, recreation, human health protection, livestock and wildlife protection, and irrigation beneficial uses, with the exception of the features specified in the administration provisions of the proposed rule. The department is in the process of developing the Use Designation Dataset as the tool for tracking beneficial use designations. While the department is near finalization of this dataset, the available dataset includes watercourses beyond the 1:100,000 scale National Hydrography Dataset (NHD) and numerous ephemeral waters.

**Requested Change:** Amend paragraph (2)(A)3 to clarify that the intent is to designate default uses to waters with perennial flow or intermittent flow and permanent pools.

(2) Designation of Uses.

(A) Rebuttable presumption. Consistent with the presumptive beneficial use protections described by 40 CFR Part 131 and Section 101(a)(2) of the Federal Clean Water Act—

1. All perennial rivers and streams.
2. All streams with permanent pools.
3. All rivers and streams **with perennial flow or permanent pools** included within the 1:100,000 scale National Hydrography Dataset (NHD) described in Subsection (2)(D)1 of this rule.
4. All lakes and reservoirs that intersect the flow lines of rivers and streams identified in Subsection (2)(A)3 of this rule, support the following designated uses: Aquatic habitat protection; human health protection; whole body contact recreation – Category B; and secondary contact recreation, as defined in this rule. This presumption is rebuttable subject to demonstration based on Use Attainability Analysis (UAA) as described in Subsection (2)(G) of this rule.

**COMMENT 4** – UAA provisions should be revised to clarify the need for this water quality standards tool and reflect federal regulations. The proposed rule includes sections to describe when UAAs are needed and how these analyses should be performed. We request that the provisions that address the necessity for a UAA under Section (2)(F) include the following revisions. These revisions would clarify that UAAs are only needed if beneficial uses were assigned in accordance with the use designation and administration provisions.

**Requested Change:** Amend Subsection (2)(A) as follows:

(A) Use Attainability. In accordance with 40 CFR 131.10(j) and Subsection (2)(D)3 of this rule, a demonstration of use attainability must be performed when the Commission—

1. Designates or has designated uses for a water body **as defined by Subsection (2)(A) and administered in Subsection (2)(D)** that do not include the protection of fish, shellfish, and wildlife, or recreation in and on the water.
2. Wishes to remove a designated use **for a water body as defined by Subsection (2)(A) and administered in Subsection (2)(D)** that protects fish, shellfish, and wildlife, or recreation in and on the water.
3. Wishes to apply sub-categories of uses **for a water body as defined by Subsection (2)(A) and administered in Subsection (2)(D)** that protect fish, shellfish, and wildlife, or recreation in and on the water, which require less stringent criteria than Section 304(a) of the Clean Water Act.

**COMMENT 5** – We acknowledge the department’s efforts to develop the *Missouri Aquatic Habitat Use Attainability Analyses: Water Body Survey and Assessment Protocol* for aquatic life uses; however, significant department and stakeholder efforts are needed to develop a final set of consensus-based and implementable protocols. It is critical that a document be completed that addresses all six UAA factors, but in particular, includes a detailed process to address “Factor Two”, i.e., ephemeral, low-flow conditions that prevent the attainment of the aquatic life use. We stand ready to work with the department and stakeholders to finalize these protocols.

**Requested Change:** If it is not possible to develop the UAA protocol within the rulemaking timeframe, we recommend that the department eliminate Section (2)(G)3., which references the aquatic life UAA procedures.

**Requested Change:** We recommend that the department include the provisions of 40 CFR 131.10(g) within the proposed rule Section (2)(G) regardless of whether a final set of protocols is referenced within the final regulation.

**COMMENT** – If a protocol cannot be completed by November 6, 2013, we would ask that the rule contain an implementation provision that makes permitting and impairment decisions contingent upon completion of the protocol.

**Requested Change:** Insert the following paragraph at (2)(G)5:

“Implementation of new effluent discharge limitations and designation of impairments concerning waters for which new presumed uses are assigned as Part (2)(A)3 and (2)(A)4 shall not occur until such time that a *Missouri Aquatic Habitat Use Attainability Analyses: Water Body Survey and Assessment Protocol* is completed and approved by the Commission.”

**COMMENT 6** – Paragraph (2)(D)1 states that “The 1:100,000 scale NHD shall be enhanced and supported by...reliable hydrologic and biologic data to categorize waters...” It was our understanding that the MoRAP Aquatic Gap Project data would be used at this time only to correct flawed line data in the United States Geological Survey (USGS) 1:100,000 scale map and that the biological data would not be incorporated at this time. We support the use of the hydrological and physical stream data for the stated purpose; however, the incorporation by rule of biological data at this time is premature.

**Requested Change:** Amend the following sentence in (2)(D)1:

“The 1:100,000 scale NHD shall be enhanced and supported by sufficient and reliable hydrologic and ~~biologic~~ **physical** data to categorize waters...”

**COMMENT 7** – Paragraph (2)(G)4 suggests that the U.S. Environmental Protection Agency (EPA) must approve any protocol or procedure used to demonstrate use attainability. EPA approval is not required and this requirement could greatly hamper the implementation of the protocol.

**Requested Change:** Amend (2)(G)4 as follows:

“Demonstration of use attainability will be performed in accordance with protocols and procedures outlined in this section of the rule and approved by the Commission ~~and U.S. Environmental Protection Agency.~~”

**COMMENT 8** – Regulations enabling water quality standard variances should provide additional flexibility and clarity to make this tool useful. The department included prescriptive proposed regulations for implementation of water quality standard variances. Current federal regulations (40 CFR 131.13) provide states with the discretion to use variances from water quality standards with little detail with regards to variance requirements. To address this lack of specificity, the U.S. EPA proposed new variance regulations earlier this month to begin the federal rulemaking process. While these proposed regulations provide U.S. EPA’s current thinking with respect to variances, the final rule may take years and its specific requirements should be dealt with in a future rulemaking. Regardless, the department’s proposed rule largely reflects the U.S. EPA proposal including use of factors provided in 40 CFR 131.10(g) as basis for variance submittals. UAA factors are appropriate for modifications to designated uses; however, these factors do not always apply to certain variance circumstances (e.g., variances from water quality criteria without beneficial use modifications). Therefore, we recommend that the department include additional flexibility other than to strictly hold to the 40 CFR 131.10(g) factors. In addition, we recommend that the department include reference to Missouri’s variance statutes, in

particular, to the public participation process. Lastly, we recommend that the department strike the reference to adding variances to the state water quality standards as this infers that a state rulemaking will be needed, which would greatly diminish the utility of variances. We offer the following rule revisions to reflect these requests.

**Requested Change:** Amend the draft variance provisions under Subsection (12) as follows:

(12) Variances.

(A) The department may grant, to an applicant for a National Pollutant Discharge Elimination System (NPDES) or Missouri state operating permit, a temporary variance to a water quality standard.

1. A variance applies only to the permittee identified in such variance and only to the water quality standard specified in the variance. A variance does not modify an underlying water quality standard.
2. A variance shall not be granted if water quality standards will be attained by implementing technology-based effluent limits required under 10 CSR 20-7.015 of this rule and by implementing cost-effective and reasonable best management practices for non-point source control.
3. A variance shall not be granted for actions that will impact water quality and general criteria conditions protected by 10 CSR 20-7.031(4).
4. A variance shall not be granted that would likely jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of such species' critical habitat.

(B) A variance may be granted if the applicant demonstrates that achieving the water quality standard is not feasible as supported by an analysis based on the factors provided in 40 CFR 131.10(g) **and other considerations, such as technology limitations.**

(C) In granting a variance, conditions and time limitations shall be set by the department with the intent that progress be made toward attaining water quality standards.

(D) Each variance shall be granted only after public notification and opportunity for public comment **in accordance with RSMo 644.061.** Once any variance to water quality standards is adopted, the department shall submit the variance to the U.S. EPA for approval **with an Attorney General Certification that the Commission adopted the variance in accordance with state law.** ~~Each variance shall be reflected in state water quality standards.~~

**COMMENT 9** – We support Missouri's sulfate and chloride criteria in Table A. However, we are concerned with the provisions included in section (5)(L). We believe the Department should develop

regional default values for the variables within the sulfate and chloride criteria equations that can be used in circumstances when contemporaneous sulfate, chloride, and hardness data are not available. We assert that default values should only be used when contemporaneous data are not available to determine attainment. We also assert that default values should be based upon representative waterbodies within the appropriate ecoregion and based upon the same statistical values for both sulfate and hardness (e.g., median for both variables). We request that MDNR modify the proposed rule to account for these comments and to clarify the process to derive default values for criteria variables.

The department and stakeholders have come a long way since the first stream classification rule was drafted in April 2010. As a result of much hard work and cooperation, this rule reflects a compromise approach that will improve the quality of Missouri's waters in a way that is more feasible and predictable for entities that are charged with protecting our water quality. We fully support the rule and offer these comments in the spirit of improvement. We commend the department for its commitment to the stakeholder process and the many long hours spent in making this rule a reality. Thank you.

**Submitted on behalf of the Cities of Liberty, Springfield, Kansas City and Independence Missouri, the Metropolitan St. Louis Sewer District and the Missouri Public Utility Alliance.**

Sincerely,

  
Edward Galbraith  
Barr Engineering Co.

  
Trent Stober  
HDR Engineering, Inc.

  
Adrienne Nemura  
Geosyntec Consultants

**Schaben, Darlene**

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**From:** Ed Galbraith <EGalbraith@barr.com>  
**Sent:** Wednesday, September 18, 2013 3:52 PM  
**To:** Hoke, John; Madras, John  
**Cc:** DNRContact, egalbraith@barr.com; Stober, Trent; Chris Zell (czell@geosyntec.com); 'Adrienne Nemura' (ANemura@Geosyntec.com)  
**Subject:** Comments on Water Quality Standards Rulemaking  
**Attachments:** WQS Rule Comments 2013\_0918 final.pdf

Gentlemen,

Please see the attached comments on the Water Quality Standards Rulemaking. These comments were compiled by Barr, HDR and Geosyntec on behalf of interested stakeholders. Please feel free to contact us if you have any questions about this submittal.

Thank you.

Ed Galbraith

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