UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 7
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Lenexa, Kansas 66219

OCT 2 2 2014

Ms. Sara Parker Pauley, Director
Missouri Department of Natural Resources
P.O. Box 176
Jefferson City, Missouri 65102

Dear Ms. Pauley:

On March 19, 2014, the U.S. Environmental Protection Agency (EPA) received the submittal of new and revised water quality standards, under a cover letter dated March 14, 2014, from the Missouri Department of Natural Resources (MDNR).[1] The new and revised WQS were approved by the Missouri Clean Water Commission on November 6, 2013, were published in the Code of State Regulations on January 29, 2014, and became effective under state law on February 28, 2014. The WQS submittal package included a certification letter from the Missouri Attorney General's Office, dated January 13, 2014.

Today, the EPA is acting on the following components of the WQS submittal: (1) the renaming/redefining of the uses applied by Missouri for the protection and propagation of fish, shellfish and wildlife; (2) new regulatory language identifying categories of streams and lakes in Missouri designated for the uses recognized under Section 101(a)(2) of the Clean Water Act (i.e., "fishable and swimmable" uses) in addition to certain other uses recognized by the state; (3) the adoption of the Missouri Use Designation Dataset (MUDD, version 1.0) as well as certain terms and definitions applicable to this dataset and (4) revisions to Table G and Table H reflecting the results of recent use attainability analyses and the adoption of MUDD. The EPA will continue to review other components of the WQS submittal and will act on those components at a later date.

TODAY'S DECISION

Under Section 303(c) of the Clean Water Act (33 U.S.C. § 1313(c)) and Title 40, parts 131.20 and 131.21 of the Code of Federal Regulations, states must review their WQS at least every three years and submit any new or revised WQS to the EPA for review and approval or disapproval. As Director of the Water, Wetlands and Pesticides Division, I am charged with the responsibility of reviewing and approving or disapproving new and revised WQS under Section 303(c). With this letter, the EPA is taking the following actions:

[1]Some supporting electronic files were inadvertently omitted from the original WQS submittal package, but these files were subsequently forwarded by the MDNR. These files arrived at the EPA Regional Office on or before June 9, 2014.

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- Approving the new and revised terms and definitions found at 10 CSR 20-7.031(1)(C)1.A-F, which describe the aquatic habitat protection uses applied in Missouri.

- Approving the new definition for MUDD found at 10 CSR20-7.031(1)(P) and the new definition for National Hydrography Dataset (NHD) found at 10 CSR20-7.031(1)(R).

- Approving the new regulatory language found at 10 CSR 20-7.031(2)(A-C) and (2)(D)1, which assigns Section 101(a)(2) uses and certain other uses to many formerly unclassified waters in Missouri.

- Approving the new authorization language for MUDD found at 10 CSR 20-7.031(2)(E).

- Partially approving and partially disapproving the uses assigned to newly classified waters in Table G, Table H and MUDD (version 1.0).

The EPA is taking no action on (1) hydrological descriptors and other non-WQS elements included in MUDD (version 1.0), (2) new regulatory language found at 10 CSR 20-7.031(2)(D)2 allowing uses to be assigned on a case-by-case basis to waters not otherwise represented in Tables G, Table H and/or MUDD (version 1.0), (3) the administrative procedure described at 10 CSR 20-7.031(2)(D)3 for exempting certain waters from the application of Section 101(a)(2) uses and other uses recognized by the state and (4) new requirements presented at 10 CSR20-7.031(2)(F) for performing, reviewing and applying use attainability analyses. As written, these provisions do not constitute WQS and are not subject to federal approval or disapproval under Section 303(c) of the CWA and 40 CFR §§ 130 and 131 (see *Items Not Subject to EPA Action*, below).

APPROVED ITEMS

10 CSR 20-7.031(1)(C) incorporates the following new and revised use categories for the protection and propagation of fish, shellfish and wildlife:

- *Warm water habitat* (six subcategories: great river, large river, small river, creek, headwater, lake or reservoir) replaces the former general warm-water fishery.

- *Cool water habitat* (five subcategories: large river, small river, creek, headwater, lake or reservoir) replaces the former cool-water fishery.

- *Cold water habitat* (five subcategories: large river, small river, creek, headwater, lake or reservoir) replaces the former cold-water fishery.

- *Limited aquatic habitat* replaces the former limited warm-water fishery.

- *Ephemeral aquatic habitat* and *modified aquatic habitat* represent newly recognized uses in Missouri.

To date, Missouri has designated none of its waters for limited aquatic habitat, ephemeral aquatic habitat or modified aquatic habitat, nor have any numeric criteria been developed and adopted by the state for

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these uses. As part of the state's next comprehensive (triennial) WQS review and prior to designating these uses for any specific water, Missouri would need to complete the necessary UAAs and adopt numeric criteria supportive of these uses consistent with 40 CFR § 131.11.

With this letter, the EPA is approving the language found at 10 CSR 20-7.031(1)(C). However, we note that Missouri did not adopt the *exceptional aquatic habitat* use considered during the rulemaking process. The EPA strongly encourages the state to adopt this use and to develop criteria (particularly biological criteria) for exceptional aquatic habitats reflecting their capacity to support highly diverse aquatic communities. Additionally, footnotes included in the submitted versions of Tables G and Table H mistakenly reference the state's former fishery-based uses for the protection of fish, shellfish and wildlife rather than the aquatic habitat uses now defined at 10 CSR 20-7.031(1)(C). The EPA encourages the state to correct this error during its next WQS rulemaking.

10 CSR 20-7.031(1)(P) defines the Missouri Use Designation Dataset and reads, in part, "[t]his dataset documents the names and locations of the state's rivers, streams, lakes and reservoirs which have been assigned designated uses." 10 CSR 20-7.031(1)(R) defines the National Hydrography Dataset, which was used in the development of MUDD (version 1.0). The EPA hereby approves these two provisions but notes that MUDD is limited in its scope of application to "rivers, streams, lakes and reservoirs." Wetlands are not identified in this dataset, nor are they assigned Section 101(a)(2) uses elsewhere in the WQS. Under the Missouri Wetland Program Plan, the MDNR has established a 2017–2018 timeframe for adopting designated uses and numeric criteria for wetlands.[2] This timeframe coincides with the state's expected triennial WQS review. The EPA stands ready to assist in this effort and looks forward to reviewing and acting on the uses and criteria ultimately adopted by the state.

Section 101(a)(2) of the CWA provides for an interim water quality goal of the protection and propagation of fish, shellfish and wildlife and for recreation in and on the water, where such uses are attainable. Section 303(c)(2)(A) requires that WQS "protect the public health and welfare, enhance the quality of water, and serve the purposes of [the CWA]." The EPA's WQS regulation interprets and implements these provisions by requiring states and authorized tribes to adopt WQS that protect the uses specified in Section 101(a)(2) of the CWA unless states and authorized tribes have demonstrated these uses to be unattainable, effectively creating a rebuttable presumption of attainability (40 CFR §§ 131.2; 131.5(a)(4); 131.6(a) and (f); 131.10(g), (j) and (k)).

10 CSR 20-7.031(2)(A) presumes Section 101(a) uses are attainable in all perennial rivers and streams, all streams with permanent pools, all rivers and streams included in the 1:100,000 scale NHD, and all lakes and reservoirs that intersect the flow lines of rivers and streams included in the 1:100,000 scale NHD. Specific uses applied under this provision include aquatic habitat protection[3], human health

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[2] The *Missouri Wetland Program Plan 2013-2018* was prepared by the MDNR's Water Resources Center with input from a variety of technical experts and stakeholders.

[3] "Aquatic habitat protection uses" are applied by the state as subcategories or tiers under the broader use designation, "protection and propagation of fish, shellfish and wildlife" (10 CSR 20-7.031(1)(C)). Warm water habitat (WWH) represents the state's default use designation with respect to the protection and propagation of fish, shellfish and wildlife: all newly classified waters represented in MUDD, Table G and Table H have been designated for WWH. The EPA finds that the state's application of WWH in this manner is consistent with the CWA and implementing regulations, because WWH is fully protective of fish, shellfish and wildlife in the vast majority of the state's newly classified lakes and streams. If the state eventually determines that specific waters are more appropriately protected under the cool water or cold water habitat uses (which are subject to more stringent temperature and dissolved oxygen criteria), the state must revise MUDD and tables G and H accordingly and submit these revisions to the EPA for approval or disapproval. Similarly, if the state

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protection, whole-body contact recreation (Category B) and secondary contact recreation[4]. 10 CSR 20-7.031(2)(B) also assigns the following additional uses: irrigation, and livestock and wildlife protection. 10 CSR 20-7.031(2)(C) allows additional uses to be assigned to waters identified in subsection (2)(A) on a case-by-case basis, subject to the approval of the Commission and the EPA. The EPA approves each of these new provisions, which comport with the Clean Water Act and applicable federal regulations (33 U.S.C. §§ 1251(a) and 1313(c); 40 CFR §§ 131.2; 131.5(a)(1),(5) 131.6(a), (b) and (f); 131.10(a) (j) and (k)).

10 CSR 20-7.031(2)(D)1 provides that the uses assigned by the state to individual water bodies and stream segments are those uses presented in Table G, Table H and MUDD. Paragraph (2)(D)1 does not alter the assigned uses but does reference paragraph (2)(D)3, which describes an administrative procedure for exempting, through potential future action, certain waters from "presumptive beneficial use protections." The EPA hereby approves 10 CSR 20-7.031(2)(D)1 but is taking no action on the exemption provision to which it refers (see *Items Not Subject to EPA Action*).

10 CSR 20-7.031(2)(E) directs the MDNR to maintain the geospatial dataset (MUDD) described at 10 CSR 20-7.031(1)(P). It also clarifies that future WQS revisions will be reflected in MUDD and will take effect upon the approval of the Commission and the EPA. This provision comports with the Clean Water Act and applicable federal regulations (33 U.S.C. §§ 1251(a) and 1313(c); 40 CFR §§ 131.2; 131.5(a)(4); 131.6(a) and (f); 131.10(g), (j) and (k)) and is hereby approved by the EPA.

As mentioned previously, MUDD "documents the names and locations of the state's rivers, streams, lakes and reservoirs *which have been assigned designated uses*" (emphasis added; see 10 CSR 20-7.031(P)). Tables G and H incorporate MUDD (version 1.0) by reference and are labeled, respectively, *Lake Classifications and Use Designations* and *Stream Classifications and Use Designations*. These tables, and the referenced database, unambiguously assign the uses specified in CWA section 101(a)(2) and other uses to individual water bodies or segments thereof. Except for the individual cases discussed later in this letter (see *Disapproved Items*), the EPA approves the new use designations contained in Table G, Table H and MUDD (version 1.0) because, as discussed above, assigning Section 101(a)(2) uses comports with the CWA and EPA's implementing regulations. This approval encompasses the designation of 2,283 additional lakes (26,253 additional lake acres) and 93,069 additional stream segments (91,065 additional stream miles) for warm water aquatic habitat protection, human health protection (fish consumption), whole body contact recreation (Category B), secondary contact recreation, irrigation, and livestock and wildlife protection.

The EPA also approves the inclusion of a 2.9-mile stream segment known as Tributary to Saint John's Creek (Franklin County; WBID 3337) in both Table H and MUDD (version 1.0) and the designation of this segment for warm water aquatic habitat protection, human health protection (fish consumption), irrigation, livestock and wildlife protection, and secondary contact recreation (SCR). A recreational UAA was performed on this formerly unclassified stream segment in October 2008 during a period of

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eventually designates specific waters for aquatic habitat uses that are less protective than WWH, these designations must be supported by UAAs and submitted to the EPA for approval or disapproval.

[4]The EPA is approving Missouri's adoption of secondary contact recreation as consistent with the CWA and the EPA's implementing regulations because the state adopted such a use in conjunction with whole-body contact recreation, which is protective of primary contact recreation.

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normal to above normal precipitation and base stream flow. Based on this UAA, the MDNR concluded that whole body contact recreation (WBC) is not attainable in WBID 3337 owing to insufficient stream depth, citing 40 CFR 131.10(g)(2). No public comments were received by the MDNR contradicting this finding or otherwise pointing to the historical or current use of this segment for WBC. The EPA has completed its review of the submitted UAA, finds that it is technically and scientifically defensible, and agrees that SCR currently represents the attainable use for WBID 3337, in light of the factors and constraints evaluated as part of the UAA.

DISAPPROVED ITEMS

As discussed above, Section 101(a)(2) of the CWA provides for an interim water quality goal of the protection and propagation of fish, shellfish and wildlife and recreation in and on the water, where such uses are attainable. Section 303(c)(2)(A) requires that WQS "protect the public health and welfare, enhance the quality of water, and serve the purposes of [the CWA]." The EPA's WQS regulation interprets and implements these provisions by requiring WQS to protect the uses specified in Section 101(a)(2) of the CWA unless these uses have been demonstrated to be unattainable, effectively creating a rebuttable presumption of attainability (40 CFR §§ 131.2; 131.5(a)(4); 131.6(a) and (f); 131.10(g), (j) and (k)). If a state wishes to remove a Section 101(a)(2) use that is not an existing use, or to adopt a use subcategory that requires less stringent criteria, it must demonstrate, through a use attainability analysis (UAA), that the Section 101(a)(2) use is unattainable (40 CFR § 131.10(j)(2)).

Federal regulations at 40 CFR § 131.3(g) define a UAA as a "structured, scientific assessment of the factors affecting the attainment of the use which may include physical, chemical, biological, and economic factors as described in 40 CFR § 131.10(g)." A UAA must provide the information needed to determine whether a Section 101(a)(2) use is unattainable and to justify the application of any use subcategory affording a lesser degree of water quality protection. In other words, the administrative record must contain an adequate scientific and technical rationale for removing the more protective use designation (40 CFR §§ 131.5(a)(4) and 131.6(f)). In demonstrating that the attainment of a Section 101(a)(2) use is not feasible, a state must cite and satisfy at least one of the six regulatory factors described at 40 CFR § 131.10(g).

Missouri's WQS submittal, in part, did not comply with the above-mentioned federal requirements. Specifically, four stream segments previously lacking recreational use assignments were designated for SCR, but not WBC, in MUDD (version 1.0).[5] No UAAs were submitted by the MDNR justifying the state's decision not to designate these waters for WBC, contrary to 40 CFR §§ 131.5(a)(4) and 131.6(f) and 131.10(g) and (j). Based on these findings, the EPA disapproves the designation of these waters for SCR. In order to remedy this disapproval, MDNR needs to either designate these segments for WBC or conduct UAAs and adopt uses consistent with CWA requirements.

PREVIOUSLY DISAPPROVED ITEMS

Missouri's WQS submittal also failed to reflect the EPA's action of September 27, 2013. This action responded to the state's previous (December 10, 2012) submittal, in part by disapproving:

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[5] These included Wildcat Creek (WBID 0482), Tributary to Willow Fork (WBID 0956), Rubeneau Branch (WBID 2123) and Tributary to Bird Branch (WBID 3294).

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- The removal of WBC and assignment of SCR in 35 instances where (1) no UAA was submitted to the EPA demonstrating that WBC is unattainable, (2) the submitted data and analyses were not technically and scientifically defensible as required by 40 CFR § 131.5(a)(4), or (3) sources of information other than the UAA (e.g., public comments; previous studies; drought maps; aerial images) contradicted or cast uncertainty on the state's findings; and

- The assignment of SCR to six stream segments previously lacking a recreational use designation, where (1) no UAA was submitted to the EPA demonstrating that WBC is unattainable (2) the submitted data and analyses were not technically and scientifically defensible as required by 40 CFR § 131.5(a)(4), or (3) sources of information other than the UAA contradicted or cast uncertainty on the state's findings.

The MDNR recently indicated that it (1) received the EPA's action letter during the final stages of the 2013 rulemaking process, (2) was unable to complete the corresponding revisions to Table H and MUDD as part of that process and (3) will revise the table/dataset to reflect the EPA's action during the state's next WQS rulemaking.[6] At this time, the EPA reaffirms its earlier disapproval action and reminds the MDNR that, for CWA purposes, WBC remains the applicable designated use for all waters referenced in the first bulleted paragraph consistent with 131.21(e) until the state or EPA adopts standards in accordance with CWA section 303(c). In order to remedy these disapprovals, MDNR needs to either designate or re-designate these segments for WBC or conduct UAAs and adopt uses consistent with CWA requirements.

ITEMS NOT SUBJECT TO EPA ACTION

Pursuant to 40 CFR § 131.2, "[a] water quality standard defines the water quality goals of a water body, or portion thereof, by designating the use or uses to be made of the water and by setting criteria necessary to protect the uses." See also 40 CFR 130.3, 131.3(i). States adopt WQS to protect the public health and welfare, enhance water quality and serve the purposes of the CWA pursuant to sections 101(a)(2) and 303(c). WQS must provide for the protection and propagation of fish, shellfish and wildlife, support recreation in and on the water, and safeguard other potential uses of water, wherever these goals are attainable

Missouri's WQS submittal contains certain provisions that establish limited processes to be followed when revising its water quality standards. These provisions are discussed in the following paragraphs:

10 CSR 20-7.031(2)(D)2 states that "[d]esignated uses may be assigned on a case-by-case basis to water bodies or stream segments not otherwise represented in Tables G and H or in the Missouri Use Designation Dataset but falling within the jurisdiction of Missouri Clean Water Law." The EPA notes that use designations resulting from the future application of this provision would become effective for CWA purposes only if adopted by the Commission and submitted to and approved by the EPA (40 CFR §§ 131.2; 131.5(a)(4); 131.6(a) and (f); 131.10(g), (j) and (k)). As written, paragraph (2)(D)2 by itself does not define the water quality goals of a water body, or portion thereof, as defined by 40 CFR § 131. 2 and 131.3, and is not a WQS. Therefore, the EPA is taking no action on paragraph (2)(D)2.

[6] Electronic mail communication from John Hoke, MDNR, to Bob Angelo, EPA, dated May 9, 2014.

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10 CSR 20-7.031(2)(D)3 establishes an administrative procedure whereby certain waters may be exempted by the MDNR from the application of presumptive beneficial use protections following the review of "reasonable evidence." Similarly, 10 CSR 20-7.031(2)(F) sets forth an administrative procedure that the MDNR must follow when reviewing demonstrations of use attainability (UAAs). It also establishes requirements bearing on the required scope, performance and application of these demonstrations. The EPA notes that paragraph (2)(D)3 and subsection (2)(F) both relate to possible *future* changes in use designations. Neither provision modifies the *current* versions of MUDD, Table G and Table H approved by the EPA as part of today's action. Any change in the designated uses of a CWA-jurisdictional water body or stream segment resulting from the future application of either provision would become effective for CWA purposes only if adopted by the Commission and submitted to and approved by the EPA (40 CFR §§ 131.2; 131.5(a)(4); 131.6(a) and (f); 131.10(g), (j) and (k)). Neither paragraph (2)(D)(3) nor subsection (2)(F) define the water quality goals of a water body, or portion thereof, as defined by 40 CFR § 131.2 and 131. 3, and are not WQS. Therefore, the EPA is taking no action on paragraph (2)(D)3 or subsection (2)(F).

Previously, in responding to comments received on the draft WQS revision, the MDNR emphasized the overall importance of UAAs in the implementation of 10 CSR 20-7.031(2)(D)3. Consider the following excerpt from the department's January 15, 2014, Order of Rulemaking (Vol. 39, *Missouri Register*, page 299):

> *GENERAL WRITTEN COMMENT #13—Request to Exclude Urban Waters from Presumed Use Designation: city of Branson; city of Springfield; and Metropolitan St. Louis Sewer district provide maps and/or narrative requesting that urban waters within their jurisdiction not receive default Clean Water Act Section 101(a) 'fishable/swimmable' presumed use designations.*
>
> *RESPONSE: The department appreciates the information and maps provided by the commenters for consideration as exclusions from application of presumptive beneficial uses. Given the proposed language in paragraph (2)(D)3. has not yet been promulgated, entities requesting that specific waters be excluded from presumptive "fishable/swimmable" designated uses may resubmit such requests following the effective date of the rule. The department will provide a written determination and, where such requests involve changes to water quality standards, will submit the determination as a water quality standards change during the next review. Regarding the city of Branson's request, no stream flow or other data was provided to conduct a use attainability analysis under 40 CFR 131.10(g)2 for ephemeral waters on the 1:100,000 scale NHD within the city's boundaries. Additionally, no scientific justification was given for excluding Clean Water Act Section 101(a) uses for waters that may fall within the political boundaries of the city. No changes were made as a result of this comment.*
>
> *Regarding the city of Springfield's request, the city provided a list and a map of streams that it contends are manmade structures or that have no water and therefore should not be included in the 1:100,000 scale NHD dataset. However, no documentation or evidence to support these claims has been provided and no stream flow or other data was provided to conduct a use attainability analysis under 40 CFR 131.10(g)2. for ephemeral waters on the 1:100,000 scale NHD within the city's boundaries.... No changes were made as a result of this comment.*

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The MDNR's above-stated position regarding the need for UAAs is consistent with sections 101(a)(2) and 303(c)(2)(A) of the CWA and implementing federal regulations (40 CFR §§ 131.2; 131.5(a)(4); 131.6(a) and (f); 131.10(g), (j) and (k)). Any future decision to remove or revise a use as specified in Section 101(a)(2) of the Act applied to any CWA-jurisdictional water must be supported by a scientifically defensible UAA when required by 40 CFR §131.10(j) and appropriately codified in Table G, Table H and/or MUDD. Such a modification to one of the tables and/or the dataset would constitute a revision to the state's WQS and would become effective for CWA purposes only if submitted to and approved by the EPA.

CONCLUDING REMARKS

The EPA appreciates Missouri's continuing efforts to protect and restore water quality and its overall commitment to the triennial WQS review and revision process. The Agency applauds the state's decision to protect previously unclassified lakes and streams throughout Missouri for the uses specified in CWA section 101(a)(2) and other uses. This rulemaking moves the state closer to meeting the Clean Water Act's requirement to assign designated uses and corresponding criteria to all waters of the United States in Missouri. We look forward to working with the MDNR, the Commission and interested stakeholders on future WQS revisions. Should you have any questions or comments regarding today's action, please contact John DeLashmit, Chief, Water Quality Management Branch, at (913) 551-7821.

Sincerely,

Karen A. Flournoy

Karen A. Flournoy
Director
Water, Wetlands and Pesticides Division

cc: John Madras, MDNR
Corey Buffo, EPA HQ

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