



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 7**

11201 Renner Boulevard
Lenexa, Kansas 66219

AUG 26 2014

Mr. John Madras
Director, Water Protection Program
Water Protection and Soil Conservation Program
Missouri Department of Natural Resources
1101 Riverside Drive
Jefferson City, Missouri 65101

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SEP 3 2014

WATER PROTECTION PROGRAM

Dear Mr. Madras:

The U.S. Environmental Protection Agency (EPA) has completed its review of the 2014 Missouri Clean Water Act (CWA) Section 303(d) List of water quality-limited segments still requiring Total Maximum Daily Loads (TMDLs), submitted by the Missouri Department of Natural Resources (MDNR) on April 16, 2014, and received by the EPA on April 22, 2014. The EPA also reviewed supplemental information submitted by the MDNR on May 23, 2014. In the original 2014 submittal, MDNR included the following items:

- A hard copy letter officially submitting the 2014 Missouri Section 303(d) List
- A USB Flash Drive containing the following information:
 - Missouri's proposed 2014 CWA Section 303(d) impaired waters list
 - A copy of the 2014 § 303(d) Listing Methodology Document
 - A copy of the 2014 Missouri Section 305(b) Report
 - A copy of Missouri's TMDL schedule
 - An administrative record of all written comments received by MDNR on the proposed Section 303(d) List and MDNR's responses
 - A complete set of water quality assessment files
 - Sections 303(d) and 305(b) GIS shape files

The MDNR's submission included the 2014 CWA Section 303(d) List as approved by the Clean Water Commission on April 2, 2014. The EPA has determined that Missouri's list of water quality-limited segments still requiring TMDLs partially meets the requirements of Section 303(d) of the CWA and the EPA's implementing regulations. Therefore, today the EPA is partially approving and partially disapproving Missouri's 2014 CWA Section 303(d) List. The enclosure to this letter provides a more detailed rationale of today's action on Missouri's § 303(d) list. In today's decision:

- EPA approves the listing of 373 water body/pollutant pairs.
- EPA approves the delisting of 37 water body/pollutant pairs.
- EPA disapproves Missouri's decision to not list 12 water body/pollutant pairs and is proposing to restore or add them to the state's 2014 § 303(d) List.



The EPA will open a public comment period to receive comments concerning the decision to delist, restore and add water body/pollutant pairs to the state's list. The list of water bodies that the EPA proposes restoring to the 2014 § 303(d) Missouri List, as well as the rationale supporting this action, is included as an enclosure to this letter.

I congratulate you and your staff for the completion of the § 305(b) water assessment report and the § 303(d) list development and submission process. This process requires a significant amount of staff resources and involves a complex evaluation and assessment of water quality data. We look forward to working with the MDNR on the development of the 2016 Section 303(d) List.

If you would like to further discuss the EPA's action, please contact me at 913-551-7782, or John DeLashmit, Chief of the Water Quality Management Branch, at 913-551-7821.

Sincerely,



Karen A. Flournoy
Director
Water, Wetlands and Pesticides Division

Enclosure

cc: Missouri Department of Natural Resources:

- Ms. Trish Rielly, MDNR
- ✓ Mr. John Hoke, MDNR
- Mr. Refaat Mefrakis, MDNR
- Mr. Eric Monschein, EPA HQ

United States Environmental Protection Agency

Region 7

2014 Decision Document

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WATER PROTECTION PROGRAM

Missouri's Clean Water Act

Section 303(d) List

Water Quality Limited Segments Still Requiring TMDLs

Karen A. Flournoy

Karen A. Flournoy
Director,
Water, Wetlands and Pesticides Division

AUG 26 2014

Date

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**U. S. ENVIRONMENTAL PROTECTION AGENCY - REGION 7's REVIEW
of the
2014 MISSOURI CLEAN WATER ACT SECTION 303(D) LIST**

The purpose of this review document is to provide the U. S. Environmental Protection Agency's rationale for approving certain delistings from Missouri's 2012 Clean Water Act Section 303(d) List. The EPA's review of Missouri's 2014 CWA Section 303(d) List is based on EPA's analysis of whether the state reasonably considered existing and readily available data and information, and reasonably identified waters required to be listed by the CWA and the EPA regulations (40 Code of Federal Regulations § 130.7). Throughout this review document the CWA Section 303(d) List is referred to as the "§ 303(d) List" or the "Section 303(d) List."

303(d) list	Clean Water Act Section 303(d) List
C	Streams that maintain permanent pools
CFR	Code of Federal Regulations
CWA	Clean Water Act
EPA	U. S. Environmental Protection Agency
IR	Integrated Report
L1	Public drinking water supply lake
L2	Major reservoir
L3	Other lakes
MDNR	Missouri Department of Natural Resources
P1	Standing-water reaches of Class P streams
P	Permanently flowing stream
TMDL	Total Maximum Daily Load
UL	Unclassified Lake
US	Unclassified Stream
WBID	Water Body Identification
WQS	Water Quality Standards

2014 Decision Document of Missouri's Clean Water Act, Section 303(d) List Water Quality Limited Segments Still Requiring TMDLs

I. Executive Summary

On April 22, 2014, the U.S. Environmental Protection Agency received the Missouri Department of Natural Resources 2014 update to its Clean Water Act Section 303(d) List for review, herein referred to as the submittal. Following its review of Missouri's complete submittal, the EPA is partially approving and partially disapproving Missouri's 2014 Section 303(d) List as submitted. At this time, the EPA does approve the state's addition of 42 water bodies representing 59 water body/pollutant impairment pairs to its CWA Section 303(d) List. In addition, the EPA approves the removal of 35 water bodies representing 37 water body/pollutant impairment pairs from the state's CWA Section 303(d) List. This document summarizes the EPA's review and the basis for its approvals and its proposed actions.

Section 303(d)(1) of the CWA directs states to identify those waters within their jurisdictions for which effluent limitations required by Section 301(b)(1)(A) and (B) are not stringent enough to implement any applicable water quality standard (referred to as 'water quality-limited segments' defined in 40 CFR § 130.7), and to establish a priority ranking for such waters, taking into account the severity of the pollution and the uses to be made of such waters. The CWA Section 303(d) listing requirement applies to water quality-limited segments impaired by pollutant loadings from both point and nonpoint sources. After a state submits its CWA Section 303(d) List to the EPA, the Agency is required to approve or disapprove that list.

Missouri's 2014 submittal is an update to the state's most recently approved/established CWA Section 303(d) List, approved/established by the EPA on November 13, 2012 [i.e., the state's 2012 CWA Section 303(d) List]. In its submittal, the MDNR included its assessment methodology to identify waters that do not meet the state's EPA-approved water quality standards and, therefore, are required to be included on CWA Section 303(d) Lists. This 2014 assessment methodology includes revisions to the methodology used to develop the 2012 Missouri Section 303(d) List. The changes served to more clearly define requirements for data applicability. Changes to the state's listing methodology are not changes to the state's EPA-approved water quality standards and, as such, do not have an effect on the underlying protection afforded the water bodies in the state. Water quality data that meet the assessment criteria included within the state's 2014 revised methodology were evaluated by the MDNR. Those waters determined to be water quality-limited, were submitted to the EPA as an update to the 2012 Section 303(d) List. The methodology establishes specific protocols and thresholds for assessing water bodies, in addition to data sufficiency and data quality requirements. The methodology contains procedures for assessing both aquatic life use support and human health use support.

All waters which were included in Missouri's approved/established 2014 CWA Section 303(d) List will remain on the state's CWA Section 303(d) List, unless the MDNR removes a water body from a future list and the EPA approves the removal. The MDNR's submittal for the EPA's review includes an updated list reflecting, among other things:

- Additional water bodies which MDNR determined to be water quality-limited segments pursuant to the state's listing methodology and, therefore, included in the update of the Section 303(d) List which the MDNR submitted to the EPA for review; and

- Water bodies included on Missouri's previously approved/established 2012 CWA Section 303(d) List which were determined not to need TMDLs pursuant to Missouri's EPA-approved water quality standards and, therefore, removed from the update of the CWA Section 303(d) list submitted to the EPA for review (Table 1).

While the guidelines, protocols, and requirements in state statute and the MDNR methodology might be useful tools for the MDNR to use in identifying impaired waters, they are not part of the state's EPA-approved water quality standards. Hence, the EPA did not rely solely on the state statutes or the methodology in reviewing Missouri's list. Instead, the EPA reviewed all available information including any information excluded under the state's methodology to determine if the state's list was developed consistent with the underlying state EPA-approved water quality standards. The EPA's review process generally followed a two-step analysis:

- 1) The EPA Region 7 reviewed the state's listing methodology, including data collection and data assessment requirements, to determine whether, based on Missouri's EPA-approved water quality standards, the methodology was a reasonable method for identifying water quality-limited segments; and
- 2) Where the EPA was unsure whether the methodology was a reasonable method for identifying water quality-limited segments, the EPA Region 7 requested additional information from the MDNR to conduct further water body and data analysis.

Following the EPA's decision on Missouri's 2014 submission, the current Section 303(d) List (Table 2) in the state of Missouri contains:

- approved additions and removals to the 2012 Section 303(d) List; and
- waters carried over from the EPA-approved 2012 Section 303(d) List.

This action by the EPA and the waters listed in Table 2 represent a partial decision on the 2014 Missouri submittal. Following this decision, the EPA will provide for public comment on the water bodies and pollutants listed in Table 3, which the EPA proposes to add to the 2014 Missouri Section 303(d) List.

The statutory and regulatory requirements relevant to Section 303(d) Lists, and the EPA's review of Missouri's compliance with each requirement, are described in more detail below.

II. Statutory and Regulatory Background

1. Identification of Water Quality-Limited Segments for Inclusion on the Section 303(d) List

Section 303(d)(1) of the CWA directs states to identify those waters within its jurisdiction for which effluent limitations required by Section 301(b)(1)(A) and (B) are not stringent enough to implement any applicable water quality standards (WQS), and to establish a priority ranking for such waters, taking into account the severity of the pollution and the uses to be made of such waters. The Section 303(d) listing requirement applies to waters impaired by point and/or nonpoint sources.

The EPA regulations provide that states need to list waters where the following controls are not adequate to implement applicable standards: (1) technology-based effluent limitations required by the Act, (2) more stringent effluent limitations required by federal, state, or local authority, and (3) other pollution

control requirements required by state, local, or federal authority [see Code of Federal Regulations at 40 § CFR 130.7(b)(1)].

B. Consideration of Existing and Readily Available Water Quality-Related Data and Information

In developing Section 303(d) lists, states are required by 40 CFR § 130.7(b)(5) to assemble and evaluate all existing and readily available water quality-related data and information, including, at a minimum, consideration of existing and readily available data and information about the following categories of waters:

1. Waters identified as partially meeting or not meeting designated uses, or as threatened, in the state's most recent Section 305(b) report;
2. Waters for which dilution calculations or predictive modeling indicate nonattainment of applicable standards;
3. Waters for which water quality problems have been reported by governmental agencies, members of the public, or academic institutions; and
4. Waters identified as impaired or threatened in any Section 319 nonpoint assessment submitted to the EPA.

In addition to these minimum categories, states are required to evaluate any other water quality-related data and information that are existing and readily available. The EPA's *Guidance for Water Quality-Based Decisions: The TMDL Process* (EPA Office of Water, 1991, Appendix C) describes categories of water quality-related data and information that may be existing and readily available. While states are required to evaluate all existing and readily available water quality-related data and information, states may decide to rely or not rely on particular data or information in determining whether to list particular waters.

In addition to requiring states to assemble and evaluate all existing and readily available water quality-related data and information, the EPA regulations at 40 CFR § 130.7(b)(6) require states to include, as part of their submittals to the EPA, documentation to support decisions to use or not use particular data and information in decisions to list or not list waters. Such documentation needs to include, at a minimum, the following information: (1) a description of the methodology used to develop the list; (2) a description of the data and information used to identify waters; and (3) any other reasonable information requested by the EPA Region 7.

C. Priority Ranking

The EPA regulations also codify and interpret the requirement in Section 303(d)(1)(A) that states establish a priority ranking for listed waters. The regulations at 40 CFR § 130.7(b)(4) require states to prioritize waters on their Section 303(d) list for Total Maximum Daily Load development and identify those targeted for TMDL development in the next two years. In prioritizing and targeting waters, states must, at a minimum, take into account the severity of the pollution and the uses to be made of such waters. As long as these factors are taken into account, the CWA provides that states establish priorities. States may consider other factors relevant to prioritizing waters for TMDL development, including immediate programmatic needs, vulnerability of particular waters as aquatic habitats, recreational, economic, and aesthetic importance of particular waters, degree of public interest and support, and state or national policies and priorities [see 57 Federal Register 33040, 33045 (July 24, 1992) and the EPA's

1991 Guidance cited above]. The EPA reviews but does not take action to approve or disapprove the priority ranking.

III. Missouri's Approach to Identifying Waters for the 2014 Section 303(d) List

A. Missouri's 2014 Integrated Report Format

The EPA strongly encourages states to submit a single, Integrated Report (IR) to satisfy the reporting requirements of CWA Sections 303(d), 305(b) and 314. A summary of states reporting requirements for each of these sections and corresponding regulations is provided below:

CWA § 303(d) – by April 1 of all even numbered years, a list of impaired and threatened waters still requiring TMDLs; identification of the impairing pollutant(s); and priority ranking of these waters, including waters targeted for TMDL development within the next two years.

CWA § 305(b) – by April 1 of all even numbered years, a description of the water quality of all waters of the state (including, rivers/stream, lakes, estuaries/oceans and wetlands). States may also include in their CWA § 305(b) submittal a description of the nature and extent of ground water pollution and recommendations of state plans or programs needed to maintain or improve ground water quality.

CWA § 314 – in each CWA § 305(b) submittal, an assessment of status and trends of significant publicly owned lakes including extent of point source and nonpoint source impacts due to toxics, conventional pollutants, and acidification.

Each IR will report on the WQS attainment status of all waters, document the availability of data and information for each water body, identify certain trends in water quality conditions and provide information to managers in setting priorities for future actions to protect and restore the health of our nation's waters. The EPA promotes this comprehensive assessment approach to enhance a state's ability to track programmatic and environmental goals of the CWA. The EPA promotes the use of the five-part categorization format for sorting waters in the IR.¹ In summary, the categories are:

Category 1: All designated uses are supported, no use is threatened,

Category 2: Available data and/or information indicate that some, but not all of the designated uses are supported,

Category 3: There is insufficient available data and/or information to make a use support determination,

Category 4: Available data and/or information indicate that at least one designated use is not being supported or is threatened, but a TMDL is not needed, and

¹ EPA. 2005. Guidance for 2006 Assessment, Listing, and Reporting Requirements Pursuant to Sections 303(d), 305(b) and 314 of the CWA. EPA Office of Wetlands, Oceans, and Watersheds. July 29, 2005.

- and -

EPA. 2006. Memorandum: Information Concerning 2008 Clean Water Act Sections 303(d), 305(b), and 314 Integrated Reporting and Listing Decisions. EPA Office of Wetlands, Oceans, and Watersheds. October 12, 2006.

Category 5: Available data and/or information indicate that at least one designated use is not being supported or is threatened, and a TMDL is needed.

Missouri's 2014 submittal included the CWA Section 303(d) List of impaired waters (Category 5) and the state's assessment data. Today's decision is based on the 2014 Missouri § 303(d) List received by the EPA on April 22, 2014.

B. 2014 Missouri Methodology

Missouri's *Proposed Methodology for the Development of the 2014 Section 303(d) List in Missouri* (May 2, 2012), guided the MDNR's evaluation of "existing and readily available water quality-related data and information" (40 CFR § 130.7(b)(5)) and identification of "water quality-limited segments still requiring TMDLs" (40 CFR § 130.7(a)). As described earlier, Category 5 of the 2014 IR constitutes Missouri's list of impaired waters for purposes of CWA Section 303(d) and is subject to the EPA's review and approval. The EPA is taking action only on Category 5 which consists of water quality-limited segments still requiring TMDLs.

According to the state's "Listing Methodology," data sources used to assess water quality conditions in Missouri for purposes of Section 305(b) reporting and to aid in developing the state's 303(d) list include:

- 1) Fixed station water quality and sediment data collected and analyzed by MDNR.
- 2) Fixed station water quality data collected under contract by the U.S. Geological Survey.
- 3) Fixed station water quality data collected by the U.S. Geological Survey under other agreements
- 4) Fixed station water quality, sediment quality and aquatic biological data collected by the U.S. Geological Survey under their national programs.
- 5) Fixed station water quality data collected by water supply companies in Kansas City, St. Louis and Springfield.
- 6) Fixed station water quality data collected by the U.S. Army Corps of Engineers.
- 7) Fixed station water quality data collected by agencies from bordering states.
- 8) Fixed station water quality monitoring by corporations.
- 9) Annual fish tissue monitoring programs of the EPA and Missouri Department of Conservation.
- 10) Special water quality surveys conducted by MDNR.
- 11) Special water quality surveys conducted by the U.S. Geological Survey.
- 12) Special water quality surveys conducted by other agencies.
- 13) Fish occurrence and distribution monitoring by the Missouri Department of Conservation.
- 14) Fish kill and water pollution investigations by the Missouri Department of Conservation.
- 15) Selected graduate research projects.
- 16) Water quality, sediment and aquatic biological data collected by the EPA, MNDR or contractors at hazardous waste sites in the state.
- 17) Self-monitoring of receiving streams by dischargers where such monitoring is required.
- 18) Compliance monitoring of receiving waters by the MDNR and the EPA.
- 19) Bacterial monitoring of lakes and streams by county health departments and other organizations using acceptable methodologies.
- 20) Other monitoring under a MDNR approved quality assurance project plan.
- 21) Fixed station water quality and aquatic invertebrate monitoring by qualified volunteers.

The state's methodology also specifies the data quality considerations used to determine if data is acceptable for use in 303(d) assessments.

IV. Analysis of Missouri's Submission

A. Identification of Water Quality-Limited Segments for Inclusion on the CWA Section 303(d) List

The EPA has reviewed Missouri's 2014 submission and found that while Missouri's submission included all the components, as required by the CWA and federal regulations, the 2014 Missouri Section 303(d) List did not include all water quality-limited segments still requiring a TMDL. The EPA's action is based on its analysis of whether the state reasonably considered existing and readily available water quality-related data and information, and reasonably identified waters to be listed. The EPA finds that Missouri's submission only partially satisfies the statutory and regulatory requirements of Section 303(d) and 40 CFR § 130.7. The EPA is partially approving and partially disapproving the 2014 Missouri Section 303(d) List and proposes adding several water bodies and corresponding pollutants to the state's list, as described in greater detail below. The sections below cover broad categories of the EPA's action on Missouri's 2014 list submission.

B. Consideration of Existing and Readily Available Water Quality-Related Data and Information

Missouri used its *Proposed Methodology for the Development of the 2014 Section 303(d) List in Missouri, May 2, 2012*, (Listing Methodology) to develop its 2014 submission. The Listing Methodology provides a detailed explanation of the data generated by the MDNR's monitoring program; describes the procedures and methods for collecting data from other federal agencies, state agencies, universities, and monitoring networks; lists the supporting laboratories; and lists other data sources the MDNR uses for compiling the state's CWA Section 305(b) report (including the Section 314 report) and Section 303(d) list. The Listing Methodology also explains how the MDNR considers and evaluates each type of data for listing purposes.

C. Priority Ranking

Appendix C of the *Missouri Integrated Water Quality Report and Section 303(d) List, 2014*, submitted by Missouri contains the state's schedule for completing TMDLs for those waters still needing a TMDL and identified goal years for development through the year 2026. The Listing Methodology submitted with Missouri's IR details the process by which the MDNR ranks waters for TMDL development and states that the TMDL schedule represents the MDNR's priority ranking (see *Proposed Methodology for the Development of the 2014 Section 303(d) List in Missouri, May 2, 2012*). As such, the EPA understands that the TMDL development schedule serves as the state's priority ranking as required by federal regulations at 40 CFR § 130.7(b). The EPA is not taking action on these schedules as federal regulations do not require the EPA's approval of priority rankings or schedules.

D. Listing of Waters Impaired by Nonpoint Sources

Based solely on an evaluation of the final 2014 Missouri Section 303(d) List, the EPA concludes that Missouri listed waters with nonpoint sources causing or expected to cause impairment, consistent with Section 303(d) of the CWA and the EPA's guidance. The EPA believes that Section 303(d) provides

ample authority to require states to list waters impaired solely by nonpoint source pollutants. There is no expressed exclusion of the nonpoint source impaired water bodies in the CWA. The EPA's belief that Section 303(d) applies to nonpoint sources is also consistent with the CWA definition of the term "pollutant" and Congress' use of that term in other sections of the CWA, such as Section 319 and Section 320. Therefore, state § 303(d) lists are to include all water quality-limited segments still needing TMDLs, regardless of whether the source of the impairment is a point or a nonpoint source or a combination of both.

E. Public Comments

The MDNR provided several opportunities for public participation and comment in finalizing the 2014 Missouri CWA Section 303(d) List. Missouri posted its final draft 2014 § 303(d) List for a 90-day public comment period commencing on October 15, 2013, and ending on January 31, 2014. The state also held two public meetings, and a public hearing on the proposed list. Missouri evaluated and responded to each public comment and, where deemed appropriate, incorporated suggested changes into its 2014 § 303(d) List. The Missouri Clean Water Commission approved the MDNR draft Section 303(d) List on April 2, 2014. Missouri included copies of comments and Missouri's response with its list submission. In this decision, the EPA seeks public comments on the actions proposed in Section VII of this document which are summarized in Table 3.

V. Approved Listings

A. Water Quality-Limited Segments for Inclusion on the Section 303(d) List

The EPA has reviewed Missouri's 2014 list submission and concludes that the state partially developed its list of impaired waters (i.e., Category 5 of its IR) in compliance with Section 303(d) of the CWA and 40 CFR § 130.7, and as a result, approves the listing of the water bodies and corresponding pollutants identified in Table 2. The EPA's review is based on its analysis of whether the state reasonably considered existing and readily available water quality-related data and information, and reasonably identified waters to be listed. The EPA is partially approving and partially disapproving the state's submitted CWA Section 303(d) List. Water body/pollutant pairs the EPA disapproves for delisting and proposes to restore are described in Section VII of this document and the tables that follow.

B. Segment Length

As discussed in the EPA's 2006 IR guidance:

"ideally, all decisions about the WQS attainment status of individual assessment units would be based on a complete census of water quality conditions, which could involve sampling every portion of a water body at frequent intervals. Unfortunately, gathering this vast amount of data is not currently feasible, due to the limitation of current monitoring technology as well as the amount of funding available for gathering and analysis of water quality information. Given this situation, states and EPA will continue to need to make WQS attainment status determination by extrapolating, in time and space, to a substantial degree, from individual points of data."

It is important that Missouri, the EPA, and the general public be able to track the progress of individual water bodies as they are listed, pollution controls are implemented, and the applicable water quality

standards are eventually attained. The EPA's 2006 IR guidance promotes the use of the IR format, the five category approach, and the assessment database as tools to better enable states to assess and track progress of water quality-limited segments. "Use of the Integrated Report format and the use of the five-part categorization scheme envisions that each state provides a comprehensive description of the water quality standards attainment status of all segments within a state ... Fundamental to this accounting is the use of a consistent and rational segmentation and geo-referencing approach for all segments." The IR guidance continues, noting "it is important that the selected segmentation approach be consistent with the state's water quality standards," which is critical to tracking progress.

A key component of identifying impairments is determining the designated beneficial uses for each water body in the state's WQS regulations. The 2014 Missouri § 303(d) List does not contain unique identifiers for each impaired portion that are easily comparable to the classified segment in the state's WQS. The EPA raised this issue beginning with Missouri's 2004/2006 submission and added the entire classified segment to the § 303(d) listed waters for that list, and every list since. The 2014 Missouri § 303(d) List submission included the WBID, the size of the impaired portion, latitude and longitude coordinates of the impaired portion, and the size of the classified segment. While this information provides more details about Missouri's assessment, it does not remedy the need to be consistent with the state's WQS and enable easy tracking between listing cycles. While the EPA approves the addition of waters to the 2014 § 303(d) List, the EPA is maintaining the position that the entire classified segment must be listed.

To provide as much information as possible to the public, the EPA is including descriptive information submitted by Missouri for each classified water body (Table 2). This enables one to more readily compare the § 303(d) list to the state's WQS regulations and track changes from one assessment cycle to the next. Should Missouri want to assess sub-segments of waters for listing purposes, Missouri could develop smaller assessment units with defined endpoints and unique identifiers. The EPA is willing to work with Missouri on this issue to find a system that meets the needs of both the EPA and the state.

VI. Approved Delistings (Table 1)

Federal regulations require that the state provide documentation to the EPA to support its decision to list or not to list its waters. Upon request from the EPA, the state must demonstrate good cause for not including a water or waters on its list (40 CFR § 130.7(6)). In its *Guidance for 2006 Assessment, Listing and Reporting Requirements Pursuant to Sections 303(d), 305(b) and 314 of the Clean Water Act* (known as the IR guidance), the EPA describes what constitutes good cause for removing a water body from the § 303(d) list. Consistent with 40 CFR § 130.7(b), good cause for not including segments on the § 303(d) list may be based on the following determinations:

- New information or more sophisticated water quality modeling is available that demonstrates that the applicable WQS(s) is being met.
- Flaws in the original analysis of data and information led to the segment being incorrectly listed.
- Effluent limitations required by state or local authorities that are more stringent than technology-based effluent limitations, required by the CWA, will result in the attainment of WQS for the pollutant causing the impairment [pursuant to 40 CFR § 130.7(b)(1)(ii)].
- Other pollution control requirements required by state, local, or federal authority will result in attainment of WQS within a reasonable period of time [pursuant to 40 CFR § 130.7(b)(1)(iii)].

- Documentation that the state included on a previous § 303(d) list an impaired segment that was not required to be listed by the EPA regulations, e.g., segments where there is no pollutant associated with the impairment.
- The water body and pollutants are addressed in a TMDL approved or established by the EPA.

States may assign waters to Category 4 if available data and/or information indicate that one or more designated uses are not being attained or are threatened, but a TMDL is not needed. States may place these water bodies in one of the following three subcategories:

Category 4a – An EPA-approved TMDL has been established to address the water body and pollutant.

Category 4b – Alternative pollution controls required by local, state, or federal authority are sufficiently stringent and expected to achieve WQS within a reasonable period of time. One example of such controls is an EPA-approved state National Pollutant Discharge Elimination System (NPDES) permit in lieu of a TMDL (PIL).

Category 4c – Impairment not caused by a pollutant, but instead caused by other types of “pollution,” as defined by the CWA. Development of a TMDL is not required.

Table 1 is a summary list of the water body/pollutant pairs the EPA approves for delisting, as described below.

A. Waters with EPA-Approved TMDLs (one water body, Table 1)

Center Creek (WBID 3203) – Missouri proposed removing Center Creek from the 2014 § 303(d) List for zinc in sediment based on a TMDL the EPA approved on October 25, 2006. The EPA has reviewed the TMDL and concludes that Center Creek is appropriate for removal from the Missouri § 303(d) List based on that TMDL. In today’s action, the EPA is approving the delisting of Center Creek because this water body no longer requires the development of a TMDL for zinc in sediment, consistent with 40 CFR § 130.7(b).

B. Water with Required Alternative Pollution Controls (one water body, Table 1)

Straight Fork (WBID 0959) – Missouri proposed removing Straight Fork from the 2014 § 303(d) List for chloride citing a NPDES permit issued on August 1, 2013, to the city of Versailles, Missouri, provided documentation of the alternative pollution controls required under this permit and the rationale that these limits will result in the meeting of WQS. The EPA has reviewed the supporting information and concludes that Straight Fork is appropriate for removal from the Missouri § 303(d) List. In today’s action, the EPA is approving the delisting of Straight Fork because this water body no longer requires the development of a TMDL for chloride, consistent with 40 CFR 130.7(b).

C. Restored Waters the EPA Approves for Delisting as Meeting WQS (21 water bodies, Table 1)

Bee Fork (WBID 3966) - New water quality data indicates this water body is meeting WQS for lead in sediment. In its assessment for the 2014 Missouri § 303(d) List, Missouri showed there were no excursions of the narrative translator for lead in sediment among the most recent samplings. In today’s

action, the EPA is approving the delisting of the Bee Fork for lead in sediment because this water body no longer requires the development of a TMDL for lead in sediment, consistent with 40 CFR § 130.7(b).

Big Creek (WBID 2673) – New water quality data indicates this water body is meeting WQS for dissolved oxygen. In its assessment for the 2014 Missouri 303(d) List, Missouri showed there were no excursions of the criterion for dissolved oxygen in the last three years. In today’s action, the EPA is approving the delisting of Big Creek for low dissolved oxygen because this water body no longer requires the development of a TMDL for dissolved oxygen, consistent with 40 CFR § 130.7(b).

Burris Fork (WBID 0968) – New water quality data indicates this water body is meeting WQS for dissolved oxygen. In its assessment for the 2014 Missouri 303(d) List, the Listing Methodology cites the EPA’s IR guidance and recommends use of the “10 percent rule” (i.e., no more than 10 percent of measurements fail to meet the water quality criterion) for evaluating conventional pollutants.² Many states implement the “10 percent rule” by using the binomial probability method, which is a tool for calculating and balancing the probability of drawing inaccurate determinations of impairment or attainment, for assessing water quality data. Specifically, Missouri’s Listing Methodology discusses the use of the binomial test to determine if “no more than 10% of all samples exceed the water quality criterion.”³ In today’s action, the EPA is approving the delisting of Burris Fork for dissolved oxygen because this water body no longer requires the development of a TMDL for dissolved oxygen, consistent with 40 CFR § 130.7(b).

Chat Creek (WBID 3168) – New water quality data indicates this water body is meeting WQS for cadmium. In its assessment for the 2014 Missouri 303(d) List, Missouri showed there was only one excursion of the criterion for cadmium in the last three years. In today’s action, the EPA is approving the delisting of Chat Creek for cadmium because this water body no longer requires the development of a TMDL for cadmium, consistent with 40 CFR § 130.7(b).

Coldwater Creek (WBID 1706) – New water quality data indicates this water body is meeting WQS for dissolved oxygen. In its assessment for the 2014 Missouri 303(d) List there was only one dissolved oxygen measurement less than the water quality criterion in the last three years. In today’s action, the EPA is approving the delisting of Coldwater Creek for dissolved oxygen because this water body no longer requires the development of a TMDL for dissolved oxygen, consistent with 40 CFR § 130.7(b).

Dardenne Creek (WBID 0221) – New water quality data indicates this water body is meeting WQS for dissolved oxygen. In its assessment for the 2014 Missouri § 303(d) List, there was only one dissolved oxygen measurement less than the water quality criterion in the last three years. In today’s action, the EPA is approving the delisting of Dardenne Creek for dissolved oxygen because this water body no longer requires the development of a TMDL for dissolved oxygen, consistent with 40 CFR § 130.7(b).

Dardenne Creek (WBID 0222) – New water quality data indicates this water body is meeting WQS for dissolved oxygen. In its assessment for the 2014 Missouri § 303(d) List, Missouri showed there were no excursions of the criterion for dissolved oxygen in the last three years. In today’s action, the EPA is approving the delisting of Dardenne Creek for low dissolved oxygen because this water body no longer requires the development of a TMDL for dissolved oxygen, consistent with 40 CFR § 130.7(b).

² Conventional pollutants are listed in Section 304(a)(4) of the Clean Water Act as including biological oxygen demanding (BOD) pollutants, suspended solids, fecal coliform, pH, and oil and grease.

³ For additional discussion about the use of the binomial probability method, refer to the administrative record supporting EPA January 16, 2009 decision on Missouri’s 2004/2006 303(d) list.

Dark Creek (WBID 0690) – New water quality data indicates this water body is meeting WQS for dissolved oxygen. In its assessment for the 2014 Missouri § 303(d) List, Missouri showed there were no excursions of the criterion for dissolved oxygen in the last three years. In today’s action, the EPA is approving the delisting of Dark Creek for low dissolved oxygen because this water body no longer requires the development of a TMDL for dissolved oxygen, consistent with 40 CFR § 130.7(b).

Des Moines River (WBID 0036) - New water quality data indicates this water body is meeting WQS for *Escherichia coli*. In its assessment for the 2014 Missouri § 303(d) List, Missouri showed there were no excursions of the criterion for *E. coli* in the last three years. In today’s action, the EPA is approving the delisting of the Des Moines River for *E. coli* because this water body no longer requires the development of a TMDL for *E. coli*, consistent with 40 CFR § 130.7(b).

Grand Glaize Creek (WBID 2184) – New water quality data indicates this water body is meeting WQS for dissolved oxygen. In its assessment for the 2014 Missouri § 303(d) List, the Listing Methodology cites the EPA’s IR guidance and recommended use of the “10 percent rule” (i.e., no more than 10 percent of measurements fail to meet the water quality criterion) for evaluating conventional pollutants.⁴ Many states implement the “10 percent rule” by using the binomial probability method, which is a tool for calculating and balancing the probability of drawing inaccurate determinations of impairment or attainment, for assessing water quality data. Specifically, Missouri’s Listing Methodology discusses the use of the binomial test to determine if “no more than 10% of all samples exceed the water quality criterion.”⁵ These data indicate that this water body is no longer impaired for low dissolved oxygen. In today’s action, the EPA is approving the delisting of Grand Glaize Creek for low dissolved oxygen because this water body no longer requires the development of a TMDL for dissolved oxygen, consistent with 40 CFR § 130.7(b).

Maline Creek (WBID 1709) - New water quality data indicates this water body is meeting WQS for chloride. In its assessment for the 2014 Missouri § 303(d) List, Missouri showed there was only one chronic excursion of the criterion over the last three years of data. In today’s action, the EPA is approving the delisting of Maline Creek for chloride because this water body no longer requires the development of a TMDL for chloride, consistent with 40 CFR § 130.7(b).

Maline Creek (WBID 3839) - New water quality data indicates this water body is meeting WQS for pH. In its assessment for the 2014 Missouri § 303(d) List, Missouri showed there were no excursions of the criterion over the last three years of data. In today’s action, the EPA is approving the delisting of Maline Creek for pH because this water body no longer requires the development of a TMDL for pH, consistent with 40 CFR § 130.7(b).

Meramec River (WBID 2183) New water quality data indicates this water body is meeting WQS for *Escherichia coli*. In its assessment for the 2014 Missouri § 303(d) List, Missouri showed there were no excursions of the criterion for *E. coli* in the last three years. In today’s action, the EPA is approving the delisting of the Meramec River for *E. coli* because this water body no longer requires the development of a TMDL for *E. coli*, consistent with 40 CFR § 130.7(b).

⁴ Conventional pollutants are listed in Section 304(a)(4) of the Clean Water Act as including biological oxygen demanding (BOD) pollutants, suspended solids, fecal coliform, pH, and oil and grease.

⁵ For additional discussion about the use of the binomial probability method, refer to the administrative record supporting EPA January 16, 2009 decision on Missouri’s 2004/2006 303(d) list.

Muddy Creek (WBID 0853) - New water quality data indicates this water body is meeting WQS for chloride. In its assessment for the 2014 Missouri § 303(d) List, Missouri showed there were no excursions of the criterion over the last three years of data. In today's action, the EPA is approving the delisting of Muddy Creek for chloride because this water body no longer requires the development of a TMDL for chloride, consistent with 40 CFR § 130.7(b).

North Fork Cuivre River (WBID 0170) – New water quality data indicates this water body is meeting WQS for dissolved oxygen. Missouri's Listing Methodology cites EPA's IR guidance and recommended use of the "10 percent rule" (i.e., no more than 10 percent of measurements fail to meet the water quality criterion) for evaluating conventional pollutants.⁶ Many states implement the "10 percent rule" by using the binomial probability method, which is a tool for calculating and balancing the probability of drawing inaccurate determinations of impairment or attainment, for assessing water quality data. Specifically, Missouri's Listing Methodology discusses the use of the binomial test to determine if "no more than 10% of all samples exceed the water quality criterion."⁷ These data indicate that this water body is no longer impaired for dissolved oxygen. In today's action, the EPA is approving the delisting of North Fork Cuivre River for dissolved oxygen because this water body no longer requires the development of a TMDL for dissolved oxygen, consistent with 40 CFR § 130.7(b).

Shaw Branch (WBID 2170) – New water quality data indicates this water body is meeting WQS for cadmium in sediment. In its assessment for the 2014 Missouri § 303(d) List, Missouri showed there was only one excursion of the narrative translator for cadmium in sediment. In today's action, the EPA is approving the delisting of the Shaw Branch for cadmium in sediment because this water body no longer requires the development of a TMDL for cadmium in sediment, consistent with 40 CFR § 130.7(b).

Tributary to Big Otter Creek (WBID 1225) - New water quality data indicates this water body is meeting WQS for dissolved oxygen. In its assessment for the 2014 Missouri § 303(d) List, Missouri showed there were no excursions of the criterion for dissolved oxygen in the last three years. These data indicate that this water body is no longer impaired for dissolved oxygen. In today's action, the EPA is approving the delisting of Tributary to Big Otter Creek for dissolved oxygen because this water body no longer requires the development of a TMDL for dissolved oxygen, consistent with 40 CFR § 130.7(b).

Tributary to Foster Branch (WBID 3943) – New water quality data indicates that there have been no excursions of the ammonia criterion since the upgrade to the Ashland WWTP. In today's action, the EPA is approving the delisting of Tributary to Foster Branch for ammonia because this water body no longer requires the development of a TMDL for ammonia, consistent with 40 CFR § 130.7(b).

Watkins Creek (WBID 1708) - New water quality data indicates this water body is meeting WQS for pH. In its assessment for the 2014 Missouri § 303(d) List, the Listing Methodology cites EPA's IR guidance and recommended use of the "10 percent rule" (i.e., no more than 10 percent of measurements fail to meet the water quality criterion) for evaluating conventional pollutants.⁸ Many states implement the "10 percent rule" by using the binomial probability method, which is a tool for calculating and balancing the probability of drawing inaccurate determinations of impairment or attainment, for

⁶ Conventional pollutants are listed in Section 304(a)(4) of the Clean Water Act as including biological oxygen demanding (BOD) pollutants, suspended solids, fecal coliform, pH, and oil and grease.

⁷ For additional discussion about the use of the binomial probability method, refer to the administrative record supporting EPA January 16, 2009 decision on Missouri's 2004/2006 303(d) list.

⁸ Conventional pollutants are listed in Section 304(a)(4) of the Clean Water Act as including biological oxygen demanding (BOD) pollutants, suspended solids, fecal coliform, pH, and oil and grease.

assessing water quality data. Specifically, Missouri's Listing Methodology discusses the use of the binomial test to determine if "no more than 10% of all samples exceed the water quality criterion."⁹ This data indicates that this water body is no longer impaired for pH. In today's action, the EPA is approving the delisting of Watkins Creek for pH because this water body no longer requires the development of a TMDL for pH, consistent with 40 CFR § 130.7(b).

Williams Creek (WBID 3172) – Missouri identified upgrades made to the Mount Vernon WWTP in 2009 as a reason to discount older aquatic macroinvertebrate bioassessment data. The one bioassessment performed after the new permit indicated a passing Missouri Stream Condition Index score. This data indicates that this water body no longer impaired based on bioassessment. In today's action, the EPA is approving the delisting of Williams Creek for aquatic macroinvertebrate bioassessment because this water body no longer requires the development of a TMDL for aquatic macroinvertebrate bioassessment, consistent with 40 CFR § 130.7(b).

Williams Creek (WBID 3594) – New water quality data indicates this water body is meeting WQS for pH. Missouri's Listing Methodology cites EPA's IR guidance and recommended use of the "10 percent rule" (i.e., no more than 10 percent of measurements fail to meet the water quality criterion) for evaluating conventional pollutants.¹⁰ Many states implement the "10 percent rule" by using the binomial probability method, which is a tool for calculating and balancing the probability of drawing inaccurate determinations of impairment or attainment, for assessing water quality data. Specifically, Missouri's Listing Methodology discusses the use of the binomial test to determine if "no more than 10% of all samples exceed the water quality criterion."¹¹ These data indicate that this water body is no longer impaired for pH. In today's action, the EPA is approving the delisting of Williams Creek for pH because this water body no longer requires the development of a TMDL for pH, consistent with 40 CFR § 130.7(b).

D. Waters Delisted because original listing in error (eight water bodies)

Beaver Branch (WBID 3265) – The state proposed to delist this water body by assessing it against small biocriteria candidate reference streams. According to the state's EPA-approved water quality standards [MO 10 CSR 20-7.031(4) (R)], *reference* (emphasis added) waters listed in Table I shall be used for comparison purposes. The state water quality standards also state that the reference waters should be of similar size. In this case, Beaver Branch is smaller than any Ozark reference stream listed in Table I. The single measurement of zinc in sediment is not enough information for the state to list the water for contaminated sediment. However, it does serve as an additional line of evidence to indicate the bioassessment may point to an impaired biotic community. As such, the EPA would suggest further sampling of this water body to determine its attainment status. However, based on the information available, the EPA approves Missouri's decision to remove this water body/pollutant pair from the § 303(d) list consistent with 40 CFR § 130.7(b).

Dry Fork (WBID 3178) – The state proposed to delist this water body because it was assessed against reference streams which were larger than Dry Fork. According to the state's EPA-approved water

⁹ For additional discussion about the use of the binomial probability method, refer to the administrative record supporting EPA January 16, 2009 decision on Missouri's 2004/2006 303(d) list.

¹⁰ Conventional pollutants are listed in Section 304(a)(4) of the Clean Water Act as including biological oxygen demanding (BOD) pollutants, suspended solids, fecal coliform, pH, and oil and grease.

¹¹ For additional discussion about the use of the binomial probability method, refer to the administrative record supporting EPA January 16, 2009 decision on Missouri's 2004/2006 303(d) list.

quality standards [MO 10 CSR 20-7.031(4) (R)], the use of reference waters of a similar size is appropriate for comparison purposes. The state provided data supporting its contention that the reference streams used to derive the ecoregion targets were not of similar size to Dry Fork in accordance with its water quality standards. As such, the EPA approves Missouri's decision to remove this water body/pollutant pair from the § 303(d) list, consistent with 40 CFR § 130.7(b).

Hays Creek (WBID 0097) – The state proposed to delist this water body by assessing it against small biocriteria candidate reference streams. According to the state's EPA-approved water quality standards [MO 10 CSR 20-7.031(4) (R)], *reference* (emphasis added) waters listed in Table I shall be used for comparison purposes. The state water quality standards also state that the reference waters should be of similar size. In this case, Hays Creek is smaller than any Ozark reference stream listed in Table I. As such, the EPA approves Missouri's decision to remove this water body/pollutant pair from the § 303(d) list, consistent with 40 CFR § 130.7(b).

Koen Creek (WBID 2171) – Koen Creek was identified as impaired for fish bioassessment on the 2012 Missouri § 303(d) List. Missouri showed that one of the assessments did not follow the same procedures which Missouri has since established for this type of assessment and so the results are not comparable for assessment. In today's action, the EPA is approving the delisting of Koen Creek for fish bioassessment because this water body no longer requires the development of a TMDL for fish bioassessment, consistent with 40 CFR § 130.7(b).

Middle Fork Black River (WBID 2744) – Middle Fork Black River was identified as impaired for aquatic macroinvertebrate bioassessment on the 2012 Missouri § 303(d) List. Missouri showed that the assessments did not include an assessment of habitat conditions when the crayfish survival experiments were conducted. As such, the cause of low survival scores was not determined to be a pollutant. In today's action, the EPA is approving the delisting of Middle Fork Black River for aquatic macroinvertebrate bioassessment because this water body no longer requires the development of a TMDL for aquatic macroinvertebrate bioassessment, consistent with 40 CFR § 130.7(b).

River des Peres (WBID 3827) – River des Peres was identified as impaired for chloride on the 2012 Missouri § 303(d) List. Missouri showed the data used for this listing was not from this segment of the River des Peres. In today's action, the EPA is approving the delisting of River des Peres for chloride because this water body no longer requires the development of a TMDL for chloride consistent with 40 CFR § 130.7(b).

River des Peres (WBID 3827) – River des Peres was identified as impaired for *Escherichia coli* on the 2012 Missouri § 303(d) List. Missouri showed the data used for this listing was not from this segment of the River des Peres. In today's action, the EPA is approving the delisting of River des Peres for *E. coli* because this water body no longer requires the development of a TMDL for *E. coli* consistent with 40 CFR § 130.7(b).

Tiff Creek (WBID 3763) – Tiff Creek was identified as impaired for fish bioassessment on the 2012 Missouri § 303(d) List. Missouri showed that the fish assessment did not include an assessment of habitat conditions when samples were collected. As such, the cause of fish assessment scores was not determined to be a pollutant. In today's action, the EPA is approving the delisting of Tiff Creek for fish bioassessment because this water body no longer requires the development of a TMDL for fish bioassessment, consistent with 40 CFR § 130.7(b).

E. Waters Delisted and Relisted Under New Name, Number, or More Specific Cause (six water bodies)

Dardenne Creek (WBID 0221) – This water body was listed on the 2012 Missouri § 303(d) List for impairment by an unknown cause. In its proposed 2014 § 303(d) List, the state changed the impairment to aquatic macroinvertebrate bioassessment/unknown. In today's action, the EPA is approving the delisting of unknown, consistent with 40 CFR § 130.7(b). On the 2014 Missouri § 303(d) List, this water body is listed with an impairment of aquatic macroinvertebrate bioassessment/unknown.

Fox Creek (WBID 1842) – This water body was listed on the 2012 Missouri § 303(d) List for impairment by an unknown cause. In its proposed 2014 § 303(d) List the state changed the impairment to aquatic macroinvertebrate bioassessment/unknown. In today's action, the EPA is approving the delisting of unknown, consistent with 40 CFR § 130.7(b). On the 2014 Missouri § 303(d) List, this water body is listed with an impairment of aquatic macroinvertebrate bioassessment/unknown.

Knob Knoster St. Park Lakes (Lake Bueto) (WBID 7196) – This water body was listed on the 2012 Missouri § 303(d) List for impairment by mercury in fish tissue. In its proposed 2014 § 303(d) List, the state changed the water body to Lake Bueto (WBID 7469) after assigning the specific lake located in the Knob Knoster St, Park with its own identification. In today's action, the EPA is approving the identification of a specific water body, consistent with 40 CFR § 130.7(b). On the 2014 Missouri § 303(d) List, this water body is listed as Lake Bueto (WBID 7469) with an impairment of mercury in fish tissue.

Peruque Creek (WBID 0217) – This water body was listed on the 2012 Missouri § 303(d) List for impairment by inorganic sediment. In its proposed 2014 § 303(d) List the state changed the impairment to fishes bioassessment/unknown. This change aligns with the original impairment which the EPA used to add this water to the state's list. In today's action, the EPA is approving the delisting of inorganic sediment, consistent with 40 CFR § 130.7(b). On the 2014 Missouri § 303(d) List, this water body is listed with an impairment of fishes bioassessment/unknown.

Peruque Creek (WBID 0218) – This water body was listed on the 2012 Missouri § 303(d) List for impairment by inorganic sediment. In its proposed 2014 § 303(d) List, the state changed the impairment to fishes bioassessment/unknown. This change aligns with the original impairment which the EPA used to add this water to the state's list. In today's action, the EPA is approving the delisting of inorganic sediment, consistent with 40 CFR § 130.7(b). On the 2014 Missouri § 303(d) List, this water body is listed with an impairment of fishes bioassessment/unknown.

River des Peres (WBID 1711U-01) – This water body was listed on the 2012 Missouri § 303(d) List for impairment by chloride. In its proposed 2014 § 303(d) List, the state changed the WBID to 3972. In today's action, the EPA is approving the delisting of chloride in WBID 1711U-01, consistent with 40 CFR § 130.7(b). On the 2014 Missouri § 303(d) List, this water body is listed as River des Peres (WBID 3972) with a pollutant of chloride.

VII. EPA Proposed Changes to the 2014 Missouri § 303(d) List

After review of Missouri's submittal for its 2014 § 303(d) List, the EPA proposes to make certain additions and corrections to that submittal. These proposed actions are outlined below and consist of water body/pollutant pairs that the EPA proposes to restore or add to Missouri's list of impaired waters.

A. Water Bodies and Pollutants EPA Proposes Restoring or Adding to Missouri's 2014 CWA Section 303(d) List (12 water bodies, Table 3)

Big River (WBID 2080) – The state proposed to delist this water body for zinc in sediment based on a geometric averaging of the zinc concentration data from all sites in the water body. When the data was examined, it was found that one portion of the water body, amounting to approximately 15 miles, was consistently impaired using the state's narrative translator for toxic sediment. The averaging of non-impaired sections of the water body with this portion masked the impairment. As such, the EPA disapproves Missouri's decision to remove this water body/pollutant pair from the § 303(d) list and is proposing to relist zinc in sediment to the 2014 Missouri § 303(d) List.

Blackberry Creek (WBID 3184) – The state proposed to delist this water body for sulfate plus chloride and replace the listing with one for total dissolved solids. Missouri's EPA-approved water quality standards do not contain a numeric criterion for total dissolved solids. However, it does contain a numeric criterion for sulfate plus chloride. As such, the EPA disapproves Missouri's decision to delist this water body/pollutant pair from the § 303(d) list for sulfate plus chloride and is proposing to relist Blackberry Creek for sulfate plus chloride to the 2014 Missouri § 303(d) List.

Brush Creek (WBID unclassified) – During the state's public comment period, data obtained from the EPA's urban waters sampling efforts in the Kansas City metropolitan area were brought to the state's attention by the EPA. This data was available on the EPA's STORET data warehouse even before the EPA brought it to the state's attention. The state chose not to assess this data for the 2014 § 303(d) List based on timing and the ability to provide time for stakeholder input. The EPA considers this the state's rationale for not using all readily available data [40 CFR § 130.7(b)(6)(iii)]. As this data had been available for some time before the cut-off period for the state's data gathering efforts, the EPA has determined that the state did not assess all readily available data. As such, the EPA proposes to add Brush Creek to the 2014 Missouri § 303(d) list for the PAHs: benzo(a)pyrene, crysene, phenanthrene and pyrene in sediment.

Drywood Creek (WBID 1314) – The state proposed to delist this water body for sulfate plus chloride and replace the listing with one for total dissolved solids. Missouri's EPA-approved water quality standards do not contain a numeric criterion for total dissolved solids. However, it does contain a numeric criterion for sulfate plus chloride. As such, the EPA disapproves Missouri's decision to delist this water body/pollutant pair from the § 303(d) list for sulfate plus chloride and is proposing to relist Drywood Creek for sulfate plus chloride to the 2014 Missouri § 303(d) List.

Jones Branch (WBID unclassified) – During the state's public comment period, data resulting from the EPA's TMDL sampling efforts in the Springfield metropolitan area were brought to the state's attention by the EPA. This data was also made available to the state and the city as the results were received during the sampling period. The state chose not to assess this data for the 2014 § 303(d) List based on timing and the ability to provide time for stakeholder input. The EPA considers this the state's rationale for not using all readily available data [40 CFR § 130.7(b)(6)(iii)]. As this data had been available for

some time before the cut-off period for the state's data gathering efforts, the EPA has determined that the state did not assess all readily available data. As such, the EPA proposes to add Jones Branch to the 2014 Missouri § 303(d) List for lead in sediment.

Jordan Creek (WBID 3374) – During the state's public comment period, data resulting from the EPA's TMDL sampling efforts in the Springfield metropolitan area were brought to the state's attention by the EPA. This data was also made available to the state and the city as the results were received during the sampling period. The state chose not to assess this data for the 2014 § 303(d) List based on timing and the ability to provide time for stakeholder input. The EPA considers this the state's rationale for not using all readily available data [40 CFR § 130.7(b)(6)(iii)]. As this data, in addition to data gathered under contract by the city of Springfield, had been available for some time before the cut-off period for the state's data gathering efforts, the EPA has determined that the state did not assess all readily available data. As such, the EPA proposes to add Jordan Creek to the 2014 Missouri § 303(d) List for the PAHs: benzo(a)anthracene, benzo(a)pyrene, crysene, phenanthrene and pyrene in sediment.

North Branch Wilsons Creek (WBID 3811) – During the state's public comment period, data resulting from the EPA's TMDL sampling efforts in the Springfield metropolitan area were brought to the state's attention by the EPA. This data was also made available to the state and the city as the results were received during the sampling period. The state chose not to assess this data for the 2014 § 303(d) List based on timing and the ability to provide time for stakeholder input. The EPA considers this the state's rationale for not using all readily available data [40 CFR § 130.7(b)(6)(iii)]. As this data had been available for some time before the cut-off period for the state's data gathering efforts, the EPA has determined that the state did not assess all readily available data. As such, the EPA proposes to add North Branch Wilsons Creek to the 2014 Missouri § 303(d) List for zinc in sediment.

Pearson Creek (WBID 2373) – During the state's public comment period, the EPA informed Missouri that with the withdrawal of the EPA established TMDL for Pearson Creek this water body needed to be reassessed for inclusion on the state's § 303(d) list. The state's submittal did not include this water body. The justification for not listing Pearson Creek was that it needs to be reassessed based on small candidate reference streams. According to the state's EPA-approved water quality standards [MO 10 CSR 20-7.031(4) (R)], *reference* (emphasis added) waters listed in Table I shall be used for comparison purposes. Additionally, a review of the listing history for this water body showed that it was originally listed as impaired for a documented decline in biotic diversity. This cause of impairment is not dependent on an assessment of the state's MSCI score procedure. As such, the EPA proposes to add Pearson Creek to the 2014 Missouri § 303(d) List for the previously listed unknown pollutant to address this decline in biotic diversity.

Troublesome Creek (WBID 0074) – The state has proposed to delist this water body for an unknown pollutant based on a habitat assessment undertaken during an aquatic macroinvertebrate assessment. However, in the discussion of the habitat assessment one of the stated factors was fine substrates and the stability of stream banks. These conditions indicate that a pollutant, sediment, is a causative factor in the resulting impaired aquatic macroinvertebrate community. In addition, this segment of Troublesome Creek is listed as impaired for low dissolved oxygen, which indicates an aquatic life impairment. As such, the EPA disapproves Missouri's decision to remove this water body/pollutant pair from the § 303(d) List and is proposing to relist Troublesome Creek for the identified pollutant of sediment to the 2014 Missouri § 303(d) List.

Turkey Creek (WBID 3217) – The state proposed to delist this water body for lead in sediment based on a geometric averaging of the lead in sediment concentration data from all sites in the water body. When the data was examined it was found that two sites in the water body, at approximately 0.5 and 5.8 miles upstream from the mouth, were consistently impaired using the state’s narrative translator for toxic sediment over the last two years of sampling results. The averaging of non-impaired sections of the water body with this portion masked the impairment. As such, the EPA disapproves Missouri’s decision to remove this water body/pollutant pair from the § 303(d) List and is proposing to relist Turkey Creek for lead in sediment to the 2014 Missouri § 303(d) List.

Whetstone Creek (WBID 1505U) – The state has proposed to delist this water body for ammonia based on an EPA-approved TMDL. While there is an EPA-approved TMDL for the downstream classified segment of this stream, it specifically states that the loading capacity assigned in the TMDL will not result in this upstream segment meeting water quality standards. In addition, the removal of the WWTP discharging to this segment that was identified in the downstream TMDL has not occurred. As such, the EPA disapproves Missouri’s decision to remove this water body/pollutant pair from the § 303(d) List and is proposing to relist Whetstone Creek for ammonia to the 2014 Missouri § 303(d) List.

Wilsons Creek (WBID 2375) – During the state’s public comment period, data resulting from the EPA’s TMDL sampling efforts in the Springfield metropolitan area were brought to the state’s attention by the EPA. This data was also made available to the state and the city as the results were received during the sampling period. The state chose not to assess this data for the 2014 § 303(d) list based on timing and the ability to provide time for stakeholder input. The EPA considers this the state’s rationale for not using all readily available data [40 CFR § 130.7(b)(6)(iii)]. As this data, in addition to data gathered under contract by the city of Springfield, had been available for some time before the cut-off period for the state’s data gathering efforts, the EPA has determined that the state did not assess all readily available data. As such, the EPA proposes to add this water to the 2014 Missouri § 303(d) List for the PAHs: benzo(a)anthracene, benzo(a)pyrene, crysene, phenanthrene and pyrene in sediment.

Table 1
Missouri-Submitted Water Body/Pollutant Pairs the EPA Approves for Delisting

No.	Water Body Name	WBID	Class	Classified Segment (mi/acres)	County	Pollutant	Comment
1	Beaver Branch	3265	P	2	McDonald	Aquatic Macroinvertebrate Bioassessment	Listed in error, watershed smaller than reference watersheds
2	Bee Fork	3966	U	n/a	Reynolds	Lead in sediment	Meeting WQS, reason unspecified
3	Big Creek	2673	P	28.7	Texas/Shannon	Dissolved Oxygen	Meeting WQS, reason unspecified
4	Burris Fork	968	P	13.2	Moniteau	Dissolved Oxygen	Meeting WQS, reason unspecified
5	Center Creek	3203	P	26.8	Jasper	Zinc in sediment	EPA approved TMDL
6	Chat Creek	3168	C	2.1	Lawrence	Cadmium	Meeting WQS, reason unspecified
7	Coldwater Creek	1706	C	5.5	St. Louis	Dissolved Oxygen	Meeting WQS, reason unspecified
8	Dardenne Creek	0221	P	15.0	St. Charles	Cause unknown	Change in identified impairment
9	Dardenne Creek	0221	P	15.0	St. Charles	Dissolved Oxygen	Meeting WQS, reason unspecified
10	Dardenne Creek	0222	C	6.0	St. Charles	Dissolved Oxygen	Meeting WQS, reason unspecified
11	Dark Creek	0690	C	9.1	Randolph	Dissolved Oxygen	Meeting WQS, reason unspecified
12	Des Moines River	0036	P	29.0	Clark	Escherichia coli	Meeting WQS, reason unspecified
13	Dry Fork	3178	C	3.4	Lawrence	Aquatic Macroinvertebrate Bioassessment	Listed in error, watershed smaller than reference watersheds
14	Fox Creek	1842	P	42.0	Clark	Cause unknown	Change in identified impairment
15	Grand Glaize Creek	2184	C	4.0	St. Louis	Dissolved Oxygen	Meeting WQS, reason unspecified

No.	Water Body Name	WBID	Class	Classified Segment (mi/acres)	County	Pollutant	Comment
16	Hays Creek	0097	C	1.5	Ralls	Aquatic Macroinvertebrate Bioassessment	Listed in error, watershed smaller than reference watersheds
17	Knob Knooster St. Park Lakes (Lake Bueto)	7196	L3	10.0	Johnson	Mercury in fish tissue	Lake Bueto now identified separately with different WBID
18	Koen Creek	2171	C	1.0	St. Francois	Fish Bioassessment	Methodology differed between assessment periods
19	Maline Creek	1709	C	0.6	St. Louis	Chloride	Meeting WQS, reason unspecified
20	Maline Creek	3839	C	0.5	St. Louis	pH	Meeting WQS, reason unspecified
21	Meramec River	2183	P	22.0	St. Louis	Escherichia coli	Meeting WQS, reason unspecified
22	Middle Fork Black River	2744	P	21.0	Reynolds	Aquatic macroinvertebrate bioassessment	Lack of habitat data for assessment
23	Muddy Creek	0853	P	62.2	Pettis	Chloride	Meeting WQS, reason unspecified
24	North Fork Cuivre River	0170	C	8.0	Pike	Dissolved Oxygen	Meeting WQS, reason unspecified
25	Peruque Creek	0217	P	4.0	St. Charles	Inorganic Sediment	Change in identified impairment
26	Peruque Creek	0218	P	10.9	St. Charles	Inorganic Sediment	Change in identified impairment
27	River des Peres	3827	P	3.7	St. Louis	Chloride	Data used in original listing was from another segment
28	River des Peres	3827	P	3.7	St. Louis	Escherichia coli	Data used in original listing was from another segment
29	River des Peres	1711U-01	U	n/a	St. Louis	Chloride	Now listed under WBID 3972
30	Shaw Branch	2170	C	2.0	St. Francois	Cadmium in sediment	Meeting WQS, reason unspecified
31	Straight Fork	0959	C	6.0	Morgan	Chloride	Permit in Lieu of TMDL
32	Tiff Creek	3763	P	2.1	Jefferson	Fish Bioassessment	No habitat data collected

No.	Water Body Name	WBID	Class	Classified Segment (mi/acres)	County	Pollutant	Comment
33	Tributary to Big Otter Creek	1225	C	1.0	Henry	Dissolved Oxygen	Meeting WQS, reason unspecified
34	Tributary to Foster Branch	3943	U	2.0	Boone	Ammonia, un-ionized	Meeting WQS due to restoration activities
35	Watkins Creek	1708	C	3.5	St. Louis	pH	Meeting WQS, reason unspecified
36	Williams Creek	3172	P	8.5	Lawrence	Aquatic macroinvertebrate bioassessment	Upgrade of WWTP invalidates old data for current assessment
37	Williams Creek	3594	P	1.0	St. Louis	pH	Meeting WQS, reason unspecified

Table 2

Missouri-Submitted Water Quality-Limited Segments the EPA Approves for Inclusion on Missouri's 2014 Section 303(d) List

Water body/pollutant pairs where the MDNR subdivided the classified segment to include additional information about the pollutant or pollutant source (see Section IV.D, Table 2) are denoted with an "a", "b", etc. For water bodies with proposed name changes, the table lists the water body under both names but only identifies the EPA approved name under the No. column.

No.	Water Body Name	WBID	Class	MDNR Proposed Impairment Size (mi/ acres)	MDNR Water Body Size (mi/ acres)	County Upstream/ Downstream	Pollutant
1	Antire Cr.	2188	P	1.9	1.9	St. Louis	Escherichia coli (W)
2	Antire Cr.	2188	P	1.9	1.9	St. Louis	pH (W)
3	Bass Cr.	0752	C	4.4	4.4	Boone	Escherichia coli (W)
4	Baynham Br.	3240	P	4.0	4	Newton	Escherichia coli (W)
5	Bee Fk.	2760	C	1.4	8.7	Reynolds	Lead (W)
6	Bee Tree Lake	7309	L3	10	10	St. Louis	Mercury in Fish Tissue (T)
7	Beef Br.	3224	P	2.5	2.5	Newton	Cadmium (S)
8	Beef Br.	3224	P	2.5	2.5	Newton	Cadmium (W)
9	Beef Br.	3224	P	2.5	2.5	Newton	Lead (S)
10	Beef Br.	3224	P	2.5	2.5	Newton	Zinc (S)
11	Beef Br.	3224	P	2.5	2.5	Newton	Zinc (W)
12	Belcher Branch Lake	7365	L3	55.0	55	Buchanan	Mercury in Fish Tissue (T)
13	Bens Br.	3980	US	5.8	5.8	Jasper	Cadmium (S)
14	Bens Br.	3980	US	5.8	5.8	Jasper	Lead (S)
15	Bens Br.	3980	US	5.8	5.8	Jasper	Zinc (S)
16	Big Cr.	0444	P	1.0	22	Harrison	Ammonia, Total (W)
17	Big Cr.	0444	P	6.0	22	Harrison	Oxygen, Dissolved (W)
18	Big Cr.	1250	P	70.5	70.5	Jackson/Henry	Escherichia coli (W)
19	Big Cr.	2916	P	1.8	34.1	Iron	Cadmium (S)
20	Big Cr.	2916	P	1.8	34.1	Iron	Lead (S)
21	Big Piney R.	1578	P	4.0	8	Texas	Oxygen, Dissolved (W)
22	Big R.	2080	P	18.6	68	St. Francois	Cadmium (S)
23	Big R.	2080	P	18.6	68	St. Francois	Lead (S)
24	Black Cr.	0111	C	19.4	19.4	Shelby	Escherichia coli (W)
25	Black Cr.	0111	C	19.4	19.4	Shelby	Oxygen, Dissolved (W)

No.	Water Body Name	WBID	Class	MDNR Proposed Impairment Size (mi/ acres)	MDNR Water Body Size (mi/ acres)	County Upstream/ Downstream	Pollutant
26	Black Cr.	3825	P	1.6	1.6	St. Louis	Chloride (W)
27	Black Cr.	3825	P	1.6	1.6	St. Louis	Escherichia coli (W)
28	Black R.	2769	P	47.1	47.1	Butler	Mercury in Fish Tissue (T)
29	Black R.	2784	P	39.0	39.0	Wayne/Butler	Mercury in Fish Tissue (T)
30	Blackberry Cr.	3184	C	3.5	6.5	Jasper	Chloride (W)
31	Blue R.	0417	P	4.0	4	Jackson	Escherichia coli (W)
32	Blue R.	0418	P	9.0	9	Jackson	Escherichia coli (W)
33	Blue R.	0419	P	9.0	9	Jackson	Escherichia coli (W)
34	Blue R.	0421	C	11.0	11	Jackson	Escherichia coli (W)
35	Bonhomme Cr.	1701	C	2.5	2.5	St. Louis	Escherichia coli (W)
36	Bonhomme Cr.	1701	C	2.5	2.5	St. Louis	pH (W)
37	Bonne Femme Cr.	0750	P	7.8	7.8	Boone	Escherichia coli (W)
38	Bonne Femme Cr.	0753	C	7.0	7	Boone	Escherichia coli (W)
39	Bourbeuse R.	2034	P	136.7	136.7	PHELPS/Franklin	Mercury in Fish Tissue (T)
40	Bowling Green (Old) Lake	7003	L1	7.0	7.0	Pike	Chlorophyll-a(W)
41	Bowling Green (Old) Lake	7003	L1	7.0	7.0	Pike	Nitrogen, Total (W)
42	Bowling Green (Old) Lake	7003	L1	7.0	7.0	Pike	Phosphorus, Total (W)
43	Brazeau Cr.	1796	C	10.8	10.8	Perry	Escherichia coli (W)
44	Brush Cr.	1371	P	4.0	4	Polk/St. Clair	Oxygen, Dissolved (W)
45	Buffalo Cr.	3273	P	8.0	8	Newton/McDonald	Fishes Bioassessments (W)
46	Burgher Br.	1865	C	2.0	2	PHELPS	Oxygen, Dissolved (W)
47	Busch Lake #35	7057	L3	51.0	51	St. Charles	Mercury in Fish Tissue (T)
48	Busch Lake #37	7627	L3	34.0	34	St. Charles	Mercury in Fish Tissue (T)
49	Capps Cr.	3234	P	5.0	5	Barry	Escherichia coli (W)
50	Castor R.	2288	P	7.5	7.5	Bollinger	Escherichia coli (W)
51	Cedar Cr.	0737	C	7.9	37.4	Boone	Aquatic Macroinvertebrate Bioassessments/Unknown (W)
52	Cedar Cr.	1344	P	10.0	31	Cedar	Aquatic Macroinvertebrate Bioassessments/Unknown (W)
53	Cedar Cr.	1344	P	10.0	31	Cedar	Oxygen, Dissolved (W)
54	Cedar Cr.	1357	C	16.2	16.2	Cedar	Aquatic Macroinvertebrate Bioassessments/Unknown (W)
55	Cedar Cr.	1357	C	16.2	16.2	Cedar	Oxygen, Dissolved (W)
56	Center Cr.	3203	P	19.0	26.8	Jasper	Cadmium (S)
57	Center Cr.	3203	P	19.0	26.8	Jasper	Cadmium (W)

No.	Water Body Name	WBID	Class	MDNR Proposed Impairment Size (mi/ acres)	MDNR Water Body Size (mi/ acres)	County Upstream/ Downstream	Pollutant
58	Center Cr.	3203	P	19.0	26.8	Jasper	Escherichia coli (W)
59	Center Cr.	3203	P	19.0	26.8	Jasper	Lead (S)
60	Center Cr.	3210	P	21.0	21	Newton/Jasper	Escherichia coli (W)
61	Center Cr.	3214	P	4.9	4.9	Lawrence/Newton	Escherichia coli (W)
62	Chauviere Lake	7634	UJ	3.4	3.4	Clay	Mercury in Fish Tissue (T)
63	Cinque Hommes Cr.	1781	C	8.3	17.1	Perry	Escherichia coli (W)
64	Clear Cr.	1333	P	15.5	15.5	Vernon/St.Clair	Oxygen, Dissolved (W)
65	Clear Cr.	1336	C	15.0	15	Vernon	Oxygen, Dissolved (W)
66	Clear Cr.	3238	P	11.1	11.1	Barry/Newton	Escherichia coli (W)
67	Clear Cr.	3239	C	3.5	3.5	Barry/Newton	Nutrient/Eutrophication Biol. Indicators (W)
68	Clear Cr.	3239	C	3.5	3.5	Barry/Newton	Oxygen, Dissolved (W)
69	Clear Fk.	0935	P	3.1	25.8	Johnson	Oxygen, Dissolved (W)
70	Clearwater Lake	7326	L2	1635.0	1635	Reynolds/Wayne	Chlorophyll-a (W)
71	Clearwater Lake	7326	L2	1635.0	1635	Reynolds/Wayne	Mercury in Fish Tissue (T)
72	Coldwater Cr.	1706	C	5.5	5.5	St. Louis	Chloride (W)
73	Coldwater Cr.	1706	C	5.5	5.5	St. Louis	Escherichia coli (W)
74	Coonville Cr.	2177	C	1.3	1.3	St. Francois	Lead (W)
75	Courtois Cr.	1943	P	2.6	32	Washington	Lead (S)
76	Courtois Cr.	1943	P	2.6	32	Washington	Zinc (S)
77	Crane Cr.	2382	P	13.2	13.2	Stone	Aquatic Macroinvertebrate Bioassessments/Unknown (W)
78	Craven Ditch	2816	C	11.6	11.6	Butler	Oxygen, Dissolved (W)
79	Creve Coeur Cr.	1703	C	2.0	2	St. Louis	Chloride (W)
80	Creve Coeur Cr.	1703	C	2.0	2	St. Louis	Escherichia coli (W)
81	Creve Coeur Cr.	1703	C	2.0	2	St. Louis	Oxygen, Dissolved (W)
82	Crooked Cr.	1928	P	3.5	3.5	Dent/Crawford	Cadmium (S)
83	Crooked Cr.	1928	P	3.5	3.5	Dent/Crawford	Cadmium (W)
84	Crooked Cr.	1928	P	3.5	3.5	Dent/Crawford	Lead (S)
85	Crooked Cr.	3961	US	5.2	6.8	Iron/Dent	Cadmium (W)
86	Crooked Cr.	3961	US	5.2	6.8	Iron/Dent	Copper (W)
87	Current R.	2636	P	124.0	124	Shannon/Ripley	Mercury in Fish Tissue (T)
88	Dardenne Cr.	0219	P1	7.0	7	St. Charles	Oxygen, Dissolved (W)
89	Dardenne Cr.	0221	P	15.0	15	St. Charles	Sedimentation/Siltation (S)

No.	Water Body Name	WBID	Class	MDNR Proposed Impairment Size (mi/acre)	MDNR Water Body Size (mi/acre)	County Upstream/Downstream	Pollutant
90	Dardenne Cr.	0221	P	15.0	15	St. Charles	Aquatic Macroinvertebrate Bioassessments/Unknown (W)
91	Deer Cr.	3826	P	1.6	1.6	St. Louis/St. Louis City	Chloride (W)
92	Deer Cr.	3826	P	1.6	1.6	St. Louis/St. Louis City	Escherichia coli (W)
93	Deer Ridge Lake	7015	L3	48.0	48	Lewis	Mercury in Fish Tissue (T)
94	Ditch # 36	3109	P	7	7	Dunklin	Oxygen, Dissolved (W)
95	Douger Br.	3810	C	3.1	3.1	Lawrence	Lead (S)
96	Douger Br.	3810	C	3.1	3.1	Lawrence	Zinc (S)
97	Dousinbury Cr.	1180	P	3.5	3.5	Dallas	Escherichia coli (W)
98	Dry Fk.	3189	C	10.2	10.2	Jasper	Escherichia coli (W)
99	Duuro Carter Cr.	3569	P	0.6	1.5	Phelps	Oxygen, Dissolved (W)
100	East Fk. Crooked R.	0372	P	14.0	14	Ray	Oxygen, Dissolved (W)
101	East Fk. Grand R.	0457	P	25.0	25	Worth/Gentry	Escherichia coli (W)
102	East Fk. Locust Cr.	0608	P	13.0	13	Sullivan	Escherichia coli (W)
103	East Fk. Locust Cr.	0610	C	0.4	13	Sullivan	Escherichia coli (W)
104	East Fk. Locust Cr.	0610	C	12.6	13	Sullivan	Oxygen, Dissolved (W)
105	East Fk. Tebo Cr.	1282	C	10.4	14.5	Henry	Oxygen, Dissolved (W)
106	Eaton Br.	2166	C	0.9	1.2	St. Francois	Cadmium (S)
107	Eaton Br.	2166	C	0.9	1.2	St. Francois	Cadmium (W)
108	Eaton Br.	2166	C	0.9	1.2	St. Francois	Lead (S)
109	Eaton Br.	2166	C	0.9	1.2	St. Francois	Zinc (S)
110	Eaton Br.	2166	C	0.9	1.2	St. Francois	Zinc (W)
111	Eleven Point R.	2593	P	22.7	22.7	Oregon	Mercury in Fish Tissue (T)
112	Eleven Point R.	2597	P	11.4	11.4	Oregon	Mercury in Fish Tissue (T)
113	Eleven Point R.	2601	P	22.3	22.3	Oregon	Mercury in Fish Tissue (T)
114	Elim Br.	1283	C	3.0	3	Henry	Oxygen, Dissolved (W)
115	Fee Fee Cr. (new)	1704	P	1.5	1.5	St. Louis	Chloride (W)
116	Fee Fee Cr. (new)	1704	P	1.5	1.5	St. Louis	Escherichia coli (W)
117	Fellows Lake	7237	L1	800.0	800	Greene	Mercury in Fish Tissue (T)
118	Fenton Cr.	3595	P	0.5	0.5	St. Louis	Escherichia coli (W)
119	Fishpot Cr.	2186	P	2.0	2	St. Louis	Chloride (W)
120	Fishpot Cr.	2186	P	2.0	2	St. Louis	Escherichia coli (W)
121	Flat River Cr.	2168	C	5.0	9	St. Francois	Cadmium (W)

No.	Water Body Name	WBID	Class	MDNR Proposed Impairment Size (mi/acres)	MDNR Water Body Size (mi/acres)	County Upstream/ Downstream	Pollutant
122	Forest Lake	7151	L1	573.0	573	Adair	Chlorophyll-a (W)
123	Forest Lake	7151	L1	573.0	573	Adair	Nitrogen, Total (W)
124	Forest Lake	7151	L1	573.0	573	Adair	Phosphorus, Total (W)
125	Fowler Cr.	0747	C	6	6	Boone	Oxygen, Dissolved (W)
126	Fox Cr.	1842	P	7.2	7.2	St. Louis	Aquatic Macroinvertebrate Bioassessments/Unknown (W)
127	Fox R.	0038	P	42.0	42.0	Clark	Escherichia coli (W)
128	Fox Valley Lake	7008	L3	89.0	89	Clark	Chlorophyll-a (W)
129	Fox Valley Lake	7008	L3	89.0	89	Clark	Nitrogen, Total (W)
130	Fox Valley Lake	7008	L3	89.0	89	Clark	Phosphorus, Total (W)
131	Foxboro Lake	7382	L3	22.0	22	Franklin	Mercury in Fish Tissue (T)
132	Frisco Lake	7280	L3	5.0	5	Phelps	Mercury in Fish Tissue (T)
133	Gans Cr.	1004	C	5.5	5.5	Boone	Escherichia coli (W)
134	Gasconade R.	1455	P	249.0	249	Gascon./Wright	Mercury in Fish Tissue (T)
135	Grand Glaize Cr.	2184	C	4.0	4	St. Louis	Chloride (W)
136	Grand Glaize Cr.	2184	C	4.0	4	St. Louis	Escherichia coli (W)
137	Grand Glaize Cr.	2184	C	4.0	4	St. Louis	Mercury in Fish Tissue (T)
138	Grand R.	0593	P	60.0	60	Livin./Chariton	Escherichia coli (W)
139	Gravois Cr.	1712	P	2.0	2	St. Louis/St. Louis City	Chloride (W)
140	Gravois Cr.	1712	P	2.0	2	St. Louis/St. Louis City	Escherichia coli (W)
141	Gravois Cr.	1713	C	4.0	4	St. Louis/St. Louis City	Chloride (W)
142	Gravois Cr.	1713	C	4.0	4	St. Louis/St. Louis City	Escherichia coli (W)
143	Grindstone Cr.	1009	C	1.5	1.5	Boone	Escherichia coli (W)
144	Harrison County Lake	7386	L1	280	280	Harrison	Mercury in Fish Tissue (T)
145	Hazel Creek Lake	7152	L1	151.0	151	Adair	Chlorophyll-a (W)
146	Hazel Creek Lake	7152	L1	151.0	151	Adair	Mercury in Fish Tissue (T)
147	Heath's Cr.	0848	P	21.0	21.0	Pettis	Oxygen, Dissolved (W)
148	Hickory Br.	0596	C	6.8	6.8	Chariton	Oxygen, Dissolved (W)
149	Hickory Cr.	3226	P	4.9	4.9	Newton	Escherichia coli (W)
150	Hinkson Cr.	1008	C	18.0	18	Boone	Escherichia coli (W)
151	Hominy Br.	1011	C	1.0	1.0	Boone	Escherichia coli (W)

No.	Water Body Name	WBID	Class	MDNR Proposed Impairment Size (mi/acres)	MDNR Water Body Size (mi/acres)	County Upstream/ Downstream	Pollutant
152	Honey Cr.	3169	P	16.5	16.5	Lawrence	Escherichia coli (W)
153	Honey Cr.	3170	C	2.7	2.7	Lawrence	Escherichia coli (W)
154	Horse Cr.	1348	P	27.7	27.7	Cedar	Aquatic Macroinvertebrate Bioassessments/Unknown (W)
155	Horse Cr.	1348	P	27.7	27.7	Cedar	Oxygen, Dissolved (W)
156	Horseshoe Cr.	3413	C	5.8	5.8	Lafayette/Jackson	Oxygen, Dissolved (W)
157	Hough Park Lake	7388	L3	7.0	7	Cole	Mercury in Fish Tissue (T)
158	Hunnewell Lake	7029	L3	228.0	228	Shelby	Mercury in Fish Tissue (T)
159	Indian Cr.	0420	C	3.0	3	Jackson	Chloride (W)
160	Indian Cr.	0420	C	3.0	3	Jackson	Escherichia coli (W)
161	Indian Cr.	1946	P	1.9	1.9	Washington	Lead (S)
162	Indian Cr.	1946	P	1.9	1.9	Washington	Zinc (S)
163	Indian Cr.	3256	P	9.7	30.8	Newton/McDonald	Escherichia coli (W)
164	Indian Creek Lake	7389	L3	192.0	192	Livingston	Mercury in Fish Tissue (T)
165	Jacobs Br.	3223	P	1.6	1.6	Newton	Cadmium (S)
166	Jacobs Br.	3223	P	1.6	1.6	Newton	Cadmium (W)
167	Jacobs Br.	3223	P	1.6	1.6	Newton	Lead (S)
168	Jacobs Br.	3223	P	1.6	1.6	Newton	Zinc (S)
169	Jacobs Br.	3223	P	1.6	1.6	Newton	Zinc (W)
170	Jenkins Cr.	3207	P	2.8	2.8	Jasper	Escherichia coli (W)
171	Jenkins Cr.	3208	C	4.8	4.8	Newton/Jasper	Escherichia coli (W)
172	Jones Cr.	3205	P	7.5	7.5	Newton/Jasper	Escherichia coli (W)
173	Kiefer Cr.	3592	P	1.2	1.2	St. Louis	Chloride (W)
174	Kiefer Cr.	3592	P	1.2	1.2	St. Louis	Escherichia coli (W)
175	L. St. Francis R.	2854	P	24.2	32.4	Madison	Lead (S)
176	Lake Buteo	7469	L3	7	7	Johnson	Mercury in Fish Tissue (T)
177	Lake of the Woods	7436	L3	3.0	3	Boone	Mercury in Fish Tissue (T)
178	Lake of the Woods	7629	U	7.0	7	Jackson	Mercury in Fish Tissue (T)
179	Lake St. Louis	7054	L3	525.0	525	St. Charles	Mercury in Fish Tissue (T)
180	Lake Ste. Louise	7055	L3	71	71	St. Charles	Mercury in Fish Tissue (T)
181	Lake Winnebago	7212	L3	350.0	350	Cass	Mercury in Fish Tissue (T)
182	Lamine R.	0847	P	54.0	54	Morgan/Cooper	Escherichia coli (W)
183	Lat. #2 Main Ditch	3105	P	11.5	11.5	Stoddard	Oxygen, Dissolved (W)
184	Lat. #2 Main Ditch	3105	P	11.5	11.5	Stoddard	Temperature, water (W)
185	Lee Rowe Ditch	3137	C	2.3	6	Mississippi	Oxygen, Dissolved (W)

No.	Water Body Name	WBID	Class	MDNR Proposed Impairment Size (mi/ acres)	MDNR Water Body Size (mi/ acres)	County Upstream/ Downstream	Pollutant
186	Lewistown Lake	7020	L1	29.0	29	Lewis	Atrazine (W)
187	Line Cr.	3575	C	7.0	7	Platte	Escherichia coli (W)
188	Little Beaver Cr.	1529	C	3.4	3.5	Phelps	Escherichia coli (W)
189	Little Beaver Cr.	1529	C	3.4	3.5	Phelps	Sedimentation/Siltation (S)
190	Little Blue R.	0422	P	35.1	35.1	Jackson	Escherichia coli (W)
191	Little Bonne Femme Cr.	1003	P	9.0	9	Boone	Escherichia coli (W)
192	Little Dry Fk.	1863	P	1.0	5	Phelps	Oxygen, Dissolved (W)
193	Little Dry Fk.	1864	C	0.6	4.5	Phelps	Oxygen, Dissolved (W)
194	Little Drywood Cr.	1325	P	17	17	Vernon	Oxygen, Dissolved (W)
195	Little Drywood Cr.	1326	C	10.0	10	Barton/Vernon	Oxygen, Dissolved (W)
196	Little Lost Cr.	3279	P	5.8	5.8	Newton	Escherichia coli (W)
197	Little Medicine Cr.	0623	P	40.0	40	Mercer/Grundy	Aquatic Macroinvertebrate Bioassessments/Unknown (W)
198	Little Medicine Cr.	0623	P	20.0	40	Mercer/Grundy	Escherichia coli (W)
199	Little Niangua R.	1189	P	20.0	43	Dallas/Camden	Oxygen, Dissolved (W)
200	Little Osage R.	3652	C	16.0	16	Vernon	Escherichia coli (W)
201	Little Whitewater R.	2229	P	24.2	24.2	Cape Girardeau/Bollinger	Aquatic Macroinvertebrate Bioassessments/Unknown (W)
202	Locust Cr.	0606	P	36.4	84	Putnam/Sullivan	Escherichia coli (W)
203	Logan Cr.	2763	P	6.1	36.0	Reynolds	Lead (S)
204	Long Branch Cr.	0696	C	2.0	13	Macon	Oxygen, Dissolved (W)
205	Longview Lake	7097	L2	930.0	930	Jackson	Mercury in Fish Tissue (T)
206	Lost Cr.	3278	P	8.5	8.5	Newton	Escherichia coli (W)
207	M. Fk. Salt R.	0123	C	11.4	25.4	Macon	Oxygen, Dissolved (W)
208	Main Ditch	2814	C	13.0	13.0	Butler	pH (W)
209	Main Ditch	2814	C	13.0	13.0	Butler	Temperature, water (W)
210	Mainline Cr.	1709	C	0.6	0.6	St. Louis/St. Louis City	Escherichia coli (W)
211	Mainline Cr.	3839	C	0.5	0.5	St. Louis City	Chloride (W)
212	Maple Slough Ditch	3140	C	16.0	16	Miss/New Madrid	Oxygen, Dissolved (W)
213	Mark Twain Lake	7033	L2	18600.0	18600	Monroe/Ralls	Mercury in Fish Tissue (T)
214	Mattese Cr.	3596	P	1.1	1.1	St. Louis	Escherichia coli (W)
215	Mattese Cr.	3596	P	1.1	1.1	St. Louis	Chloride (W)
216	Medicine Cr.	0619	P	36.0	36	Putnam/Grundy	Escherichia coli (W)
217	Meramec R.	2183	P	22.0	22	St. Louis	Lead (S)

No.	Water Body Name	WBID	Class	MDNR Proposed Impairment Size (mi/ acres)	MDNR Water Body Size (mi/ acres)	County Upstream/ Downstream	Pollutant
218	Meramec R.	2185	P	15.7	26	St. Louis	Lead (S)
219	Miami Cr.	1299	P	18	18	Bates	Oxygen, Dissolved (W)
220	Middle Fk. Grand R.	0468	P	25.0	25	Worth/Gentry	Escherichia coli (W)
221	Middle Indian Cr.	3262	C	3.5	3.5	Newton	Aquatic Macroinvertebrate Bioassessments/Unknown (W)
222	Middle Indian Cr.	3263	P	2.2	2.2	Newton	Aquatic Macroinvertebrate Bioassessments/Unknown (W)
223	Middle Indian Cr.	3263	P	2.2	2.2	Newton	Escherichia coli (W)
224	Mississippi R.	1707.03	P	44.6	44.6	St. Louis/St. Genevieve	Escherichia coli (W)
225	Missouri R.	0226	P	179.0	179	Atchison/Jackson	Escherichia coli (W)
226	Missouri R.	0356	P	129.0	129	Jackson/Saline	Escherichia coli (W)
227	Missouri R.	1604	P	100.0	100	Gasconade/St. Charles	Escherichia coli (W)
228	Monroe City Lake	7031	L1	94	94	Ralls	Mercury in Fish Tissue (T)
229	Mozingo Lake	7402	L1	1000.0	1000	Nodaway	Mercury in Fish Tissue (T)
230	Muddy Cr.	0853	P	1.8	1.8	Pettis	Aquatic Macroinvertebrate Bioassessments/Unknown (W)
231	Mussel Fork Cr.	0674	C	29.0	29	Sullivan/Macon	Escherichia coli (W)
232	Niangua R.	1170	P	51.0	51	Webster/Dallas	Escherichia coli (W)
233	Nishabotna R.	0227	P	10.2	10.2	Atchison	Escherichia coli (W)
234	No Cr.	0550	P	22.5	22.5	Grundy/Livin.	Escherichia coli (W)
235	No Cr.	0550	P	22.5	22.5	Grundy/Livin.	Oxygen, Dissolved (W)
236	Noblett Lake	7316	L3	26.0	26	Douglas	Chlorophyll-a (W)
237	Noblett Lake	7316	L3	26.0	26	Douglas	Mercury in Fish Tissue (T)
238	Noblett Lake	7316	L3	26.0	26	Douglas	Phosphorus, Total (W)
239	Nodaway R.	0279	P	60.0	60	Nodaway	Escherichia coli (W)
240	North Bethany Lake	7109	L3	78.0	78	Harrison	Mercury in Fish Tissue (T)
241	North Fk. Cuivre R.	0170	C	8	8	Pike	Fecal Coliform (W)
242	North Fk. Spring R.	3186	P	17.4	17.4	Barton	Escherichia coli (W)
243	North Fk. Spring R.	3188	C	1.1	55.9	Barton	Ammonia, Total (W)
244	North Fk. Spring R.	3188	C	55.9	55.9	Dade/Jasper	Escherichia coli (W)
245	North Fk. Spring R.	3188	C	55.9	55.9	Dade/Jasper	Oxygen, Dissolved (W)
246	North Indian Cr.	3260	P	5.2	5.2	Newton	Aquatic Macroinvertebrate Bioassessments/Unknown (W)

No.	Water Body Name	WBID	Class	MDNR Proposed Impairment Size (mi/acres)	MDNR Water Body Size (mi/acres)	County Upstream/Downstream	Pollutant
247	North Indian Cr.	3260	P	5.0	5	Newton	Escherichia coli (W)
248	Osage R.	1293	P	39.3	39.3	Vernon/St.Clair	Oxygen, Dissolved (W)
249	Panther Cr.	1373	C	7.8	7.8	St.Clair/Polk	Oxygen, Dissolved (W)
250	Pearson Cr.	2373	P	8.0	8	Greene	Escherichia coli (W)
251	Perry Phillips Lake	7628	U	32.0	32	Boone	Mercury in Fish Tissue (T)
252	Peruque Cr.	0215	P1	9.6	9.6	St. Charles	Oxygen, Dissolved (W)
253	Peruque Cr.	0216	P	0.3	10.3	St. Charles	Cause Unknown (W)
254	Peruque Cr.	0217	P	4	4	St. Charles	Fishes Bioassessment/Unknown (W)
255	Peruque Cr.	0218	P	8.5	8.5	St. Charles	Fishes Bioassessment/Unknown (W)
256	Pickle Cr.	1755	P	7.0	7	Ste. Genevieve	pH (W)
257	Pike Cr.	2815	C	6.0	6.0	Butler	Oxygen, Dissolved (W)
258	Platte R.	0312	P	138.0	138	Worth/Platte	Escherichia coli (W)
259	Pleasant Run Cr.	1327	C	7.6	7.6	Vernon	Oxygen, Dissolved (W)
260	Pole Cat Slough	3120	P	12	12	Dunklin	Oxygen, Dissolved (W)
261	Pole Cat Slough	3120	P	12	12	Dunklin	Oxygen, Dissolved (W)
262	Pomme de Terre R.	1440	P	69.1	69.1	Webster/Polk	Temperature, water (W)
263	Red Oak Cr.	2038	C	10.0	10	Gasconade	Escherichia coli (W)
264	River des Peres	1710	C	2.6	2.6	St. Louis City	Oxygen, Dissolved (W)
265	River des Peres	1710	C	2.6	2.6	St. Louis City	Chloride (W)
266	River des Peres	1710	C	2.6	2.6	St. Louis City	Escherichia coli (W)
267	River des Peres	3972	US	6.5	6.5	St. Louis City	Oxygen, Dissolved (W)
268	Salt Cr.	0594	C	14.0	14.0	St. Louis	Chloride (W)
269	Salt Fk.	0893	P	13.3	26.7	Livin./Chariton Saline	Oxygen, Dissolved (W)
270	Salt Pine Cr.	2113	C	1.2	1.2	St. Francois	Oxygen, Dissolved (W)
271	Salt R.	0091	P	29.0	29	Ralls/Pike	Aquatic Macroinvertebrate Bioassessments/Unknown (W)
272	Salt R.	0103	P1	9.3	9.3	Ralls	Oxygen, Dissolved (W)
273	Salt R.	0103	P1	9.3	9.3	Ralls	Mercury in Fish Tissue (T)
274	Shibboleth Br.	2119	P	1	1	Washington	Oxygen, Dissolved (W)
275	Shibboleth Br.	2119	P	1	1	Washington	Lead (S)
276	Shoal Cr.	3222	P	41.1	41.1	Newton	Zinc (S)
277	Slater Br.	3754	C	3.7	3.7	Jasper	Escherichia coli (W)
278	Sni-a-bar Cr.	0399	P	32	32	Jackson/Lafayette	Escherichia coli (W) Oxygen, Dissolved (W)

No.	Water Body Name	WBID	Class	MDNR Proposed Impairment Size (mi/acres)	MDNR Water Body Size (mi/acres)	County Upstream/Downstream	Pollutant
279	South Blackbird Cr.	0655	C	5	13	Putnam	Ammonia, Un-ionized (W)
280	South Fabius R.	0071	P	80.6	80.6	Knox/Marion	Escherichia coli (W)
281	South Fk. Salt R.	0142	C	20.1	32	Callaway/Audrain	Oxygen, Dissolved (W)
282	South Grand R.	1249	P	62.5	62.5	Cass/Henry	Escherichia coli (W)
283	South Indian Cr.	3259	P	8.7	8.7	McDonald/Newton	Aquatic Macroinvertebrate Bioassessments/Unknown (W)
284	South Indian Cr.	3259	P	8.7	8.7	Newton/McDonald	Escherichia coli (W)
285	Spencer Cr.	0224	C	1.5	1.5	St. Charles	Chloride (W)
286	Spring R.	3160	C	61.7	61.7	Lawrence/Jasper	Escherichia coli (W)
287	Spring R.	3164	P	8.8	8.8	Lawrence	Escherichia coli (W)
288	Spring R.	3165	P	11.9	11.9	Lawrence	Escherichia coli (W)
289	St. Francis R.	2835	P	8.4	93.1	St. Francois	Temperature, water (W)
290	St. John's Ditch	3138	P	15.3	15.3	New Madrid	Escherichia coli (W)
291	St. John's Ditch	3138	P	15.3	15.3	New Madrid	Mercury in Fish Tissue (T)
292	Stevenson Bayou	3135	C	14	14	Mississippi	Oxygen, Dissolved (W)
293	Straight Fk.	0959	C	2.5	6	Morgan	Oxygen, Dissolved (W)
294	Strother Cr.	2751	P	6.0	6.0	Iron	Lead (S)
295	Strother Cr.	2751	P	6.0	6.0	Iron	Lead (W)
296	Strother Cr.	2751	P	6.0	6.0	Iron	Nickel (S)
297	Strother Cr.	2751	P	6.0	6.0	Iron	Zinc (S)
298	Strother Cr.	2751	P	6.0	6.0	Iron	Zinc (W)
299	Strother Cr.	2751	P	6.0	6.0	Iron	Aquatic Macroinvertebrate Bioassessments/Unknown (W)
300	Strother Cr.	3965	U	0.9	n/a	Reynolds/Iron	Arsenic (S)
301	Strother Cr.	3965	U	0.9	n/a	Reynolds/Iron	Lead (S)
302	Strother Cr.	3965	U	0.9	n/a	Reynolds/Iron	Nickel (S)
303	Strother Cr.	3965	U	0.9	n/a	Reynolds/Iron	Zinc (S)
304	Strother Cr.	3965	U	0.9	n/a	Reynolds/Iron	Zinc (W)
305	Sugar Cr.	0686	P	6.8	6.8	Randolph	Oxygen, Dissolved (W)
306	Sugar Creek Lake	7166	L1	308	308	Randolph	Mercury in Fish Tissue (T)
307	Sunset Lake	7399	L3	6.0	6	Cole	Mercury in Fish Tissue (T)
308	Table Rock Lake, James, Kings and Long Cr. Arms	7313	L2	24507.0	24507	Barry/Taney/Stone	Nutrient/Eutrophication Biol. Indicators (W)
309	Table Rock Lake, White River Arm	7313	L2	17240.0	17240	Barry/Taney	Chlorophyll (W)

No.	Water Body Name	WBID	Class	MDNR Proposed Impairment Size (mi/acres)	MDNR Water Body Size (mi/acres)	County Upstream/ Downstream	Pollutant
310	Table Rock Lake, White River Arm	7313	L2	17240.0	17240	Barry/Taney	Nitrogen, Total (W)
311	Terre Du Lac Lakes	7297	L3	103.0	103	St. Francois	Chlorophyll-a (W)
312	Terre Du Lac Lakes	7297	L3	103.0	103	St. Francois	Nitrogen, Total (W)
313	Thompson R.	0549	P	5.0	65	Harrison	Escherichia coli (W)
314	Thurman Cr.	3243	P	3.0	3	Newton	Escherichia coli (W)
315	Trib. To Chat Cr.	3963	U	0.9	0.9	Lawrence	Cadmium (W)
316	Trib. To Chat Cr.	3963	U	0.9	0.9	Lawrence	Zinc (W)
317	Trib. To Coon Cr.	0133	C	1.0	1	Randolph	Oxygen, Dissolved (W)
318	Trib. To Flat River Cr.	3938	U	0.3	0.3	St. Francois	Zinc (W)
319	Trib. To Goose Cr.	1420	C	3.0	3.0	Lawrence	Escherichia coli (W)
320	Trib. To Little Muddy Cr.	3490	C	1.0	1.0	Pettis	Chloride (W)
321	Trib. To Old Mines Cr.	2114	C	1.5	1.5	St. Francois	Sedimentation/Siltation (S)
322	Trib. To Red Oak Cr.	3360	C	0.5	0.5	Gasconade	Oxygen, Dissolved (W)
323	Trib. To Red Oak Cr.	3361	C	1.1	1.9	Gasconade	Oxygen, Dissolved (W)
324	Trib. to Shoal Cr.	3981	US	1.6	1.6	Jasper/Newton	Cadmium (W)
325	Trib. to Shoal Cr.	3981	US	1.6	1.6	Jasper/Newton	Zinc (W)
326	Trib. to Shoal Cr.	3982	US	2.2	2.2	Jasper/Newton	Zinc (W)
327	Trib. to Turkey Cr.	3983	US	2.9	2.9	Jasper	Cadmium (S)
328	Trib. to Turkey Cr.	3983	US	2.9	2.9	Jasper	Lead (S)
329	Trib. to Turkey Cr.	3983	US	2.9	2.9	Jasper	Zinc (S)
330	Trib. to Turkey Cr.	3983	US	2.9	2.9	Jasper	Zinc (W)
331	Trib. to Turkey Cr.	3984	US	2.2	2.2	Jasper	Zinc (W)
332	Trib. to Turkey Cr.	3985	US	1.6	1.6	Jasper	Zinc (W)
333	Trib. To Willow Fk.	0956	C	0.5	0.5	Moniteau	Oxygen, Dissolved (W)
334	Trib. To Wolf Cr.	3589	C	1.5	1.5	St. Francois	Oxygen, Dissolved (W)
335	Troublesome Cr.	0074	C	6.1	41.3	Knox	Oxygen, Dissolved (W)
336	Truitt Cr.	3175	C	5	5	Lawrence	Escherichia coli (W)
337	Turkey Cr.	0751	C	6.3	6.3	Boone	Escherichia coli (W)
338	Turkey Cr.	3216	P	7.7	7.7	Jasper	Cadmium (S)
339	Turkey Cr.	3216	P	7.7	7.7	Jasper	Cadmium (W)
340	Turkey Cr.	3216	P	7.7	7.7	Jasper	Escherichia coli (W)
341	Turkey Cr.	3216	P	7.7	7.7	Jasper	Lead (S)
342	Turkey Cr.	3216	P	7.7	7.7	Jasper	Zinc (S)
343	Turkey Cr.	3217	P	6.1	6.1	Jasper	Cadmium (S)

No.	Water Body Name	WBID	Class	MDNR Proposed Impairment Size (mi/acres)	MDNR Water Body Size (mi/acres)	County Upstream/Downstream	Pollutant
344	Turkey Cr.	3217	P	6.1	6.1	Jasper	Escherichia coli (W)
345	Turkey Cr.	3217	P	6.1	6.1	Jasper	Zinc (S)
346	Turkey Cr.	3282	P	2.4	2.4	St. Francois	Cadmium (W)
347	Turkey Cr.	3282	P	2.4	2.4	St. Francois	Lead (W)
348	Turkey Cr.	3282	P	1.2	2.4	St. Francois	Zinc (W)
349	Turnback Cr.	1414	P	14.0	14.0	Lawrence/Dade	Escherichia coli (W)
350	Warm Fk. Spring R.	2579	P	13.8	13.8	Oregon	Fecal Coliform (W)
351	Watkins Cr.	1708	C	3.5	3.5	St. Louis/St. Louis City	Chloride (W)
352	Watkins Cr.	1708	C	3.5	3.5	St. Louis/St. Louis City	Escherichia coli (W)
353	Weatherby Lake	7071	L3	194.0	194	Platte	Chlorophyll-a (W)
354	Weatherby Lake	7071	L3	194.0	194	Platte	Mercury in Fish Tissue (T)
355	Weatherby Lake	7071	L3	194.0	194	Platte	Nitrogen, Total (W)
356	Weatherby Lake	7071	L3	194.0	194	Platte	Phosphorus, Total (W)
357	Weldon R.	0560	P	42	42	Mercer/Grundy	Escherichia coli (W)
358	West Fk. Black R.	2755	P	2.1	32.3	Reynolds	Lead (S)
359	West Fk. Black R.	2755	P	2.1	32.3	Reynolds	Nickel (S)
360	West Fk. Drywood Cr.	1317	C	8.1	8.1	Vernon	Oxygen, Dissolved (W)
361	Whetstone Cr.	1504	P	12.2	12.2	Wright	Oxygen, Dissolved (W)
362	White Oak Cr.	3182	C	18.0	18	Lawrence/Jasper	Escherichia coli (W)
363	Wildhorse Cr.	1700	C	3.9	3.9	St. Louis	Escherichia coli (W)
364	Williams Cr.	3171	P	1.0	1	Lawrence	Escherichia coli (W)
365	Williams Cr.	3172	P	8.5	8.5	Lawrence	Escherichia coli (W)
366	Williams Cr.	3594	P	1.0	1.0	St. Louis	Escherichia coli (W)
367	Willow Br.	3280	P	2.2	2.2	Newton	Cadmium (S)
368	Willow Br.	3280	P	2.2	2.2	Newton	Escherichia coli (W)
369	Willow Br.	3280	P	2.2	2.2	Newton	Lead (S)
370	Willow Br.	3280	P	2.2	2.2	Newton	Zinc (S)
371	Willow Fk.	0955	C	6.5	6.5	Moniteau	Oxygen, Dissolved (W)
372	Wilsons Cr.	2375	P	11.9	14	Greene/Christian	Escherichia coli (W)
373	Woods Fk.	2429	C	5.5	5.5	Christian	Fisheries Bioassessment/Unknown (W)

Table 3

Water body/pollutant pairs that the EPA disapproves for delisting and is proposing to restore or add to the 2014 Missouri §303(d) List. The EPA seeks public comment on these proposed actions.

No.	Water Body Name	WBID	Class	Impaired Classified Segment (mi/acres)	County	Pollutant(s)
1	Big River	2080	P	81.3	Washington	Zinc(S)
2	Blackberry Creek	3184	C	6.5	Jasper	Sulfate+Chloride
3	Brush Creek	n/a	U	n/a	Jackson	Benzo(a)pyrene (S), Crysene (S), phenanthrene (S), Pyrene (S)
4	Dry Wood Creek	1314	P	29.9	Vernon/Barton	Sulfate+Chloride
5	Jones Branch	n/a	U	n/a	Greene	Lead (S), Metals(S)
6	Jordan Creek	3374	P	3.8	Greene	Phenanthrene (S), Benzo(a)anthracene (S), Benzo(a)pyrene(S), Chrysene(S), Pyrene (S)
7	North Branch Wilsons Creek	3745	P	3.8	Greene	Zinc (S)
8	Pearson Creek	2373	P	8.0	Greene	Cause Unknown
9	Troublesome Creek	0074	C	41.3	Knox/Marion	Sediment
10	Turkey Creek	3217	P	6.1	Jasper	Lead(S)
11	Whetstone Creek	1505U	U	n/a	Wright	Ammonia
12	Wilsons Creek	2375	P	14	Greene	Phenanthrene (S), Benzo(a)anthracene (S), Benzo(a)pyrene(S), Chrysene(S), Pyrene (S)

