

**United States Environmental Protection Agency**

**Region 7**

**2012 Decision Document**



**Iowa's Clean Water Act**

**Section 303(d) List**

**Water Quality Limited Segments Still Requiring TMDLs**

  
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# **DECISION DOCUMENT OF THE 2012 IOWA CLEAN WATER ACT, SECTION 303(D) LIST WATER QUALITY LIMITED SEGMENTS STILL REQUIRING TMDLS**

## **I. EXECUTIVE SUMMARY**

On April 1, 2013, the Iowa Department of Natural Resources (IDNR) submitted its 2012 update to its Clean Water Act (CWA) Section 303(d) List to the United States Environmental Protection Agency (EPA) for review, herein referred to as the submittal. Following its review of Iowa's complete submittal, the EPA is approving the state's removal of 73 water body segments representing 79 impairments and the addition of 78 water body segments representing 80 impairments to the state's CWA Section 303(d) List. This document summarizes the EPA's review and the basis for its decision.

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 Code of Federal Regulations (C.F.R.) § 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/or 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.

Iowa's 2012 submittal is an update to the state's most recently approved CWA Section 303(d) List, approved by the EPA on June 29, 2011 (i.e., the state's 2010 CWA Section 303(d) List). In its submittal, the IDNR included its assessment methodology to identify waters that do not meet the state's approved water quality standards and, therefore, are required to be included on CWA Section 303(d) lists. This 2012 assessment methodology includes revisions to the methodology utilized to develop the 2010 CWA Section 303(d) List for Iowa. Water quality data that meet the assessment criteria included within the state's 2012 revised methodology were evaluated by the IDNR. Those waters determined to be water quality-limited were submitted to the EPA as an update to the CWA 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.

In 2000, the Iowa legislature enacted its "Credible Data Law" which sets out, in statute, minimum requirements for the use of water quality data for purposes of state water quality standards development and review, water quality assessment, changes to the state's CWA Section 303(d) list, determining designated use support or classification, identification of water quality degradation and establishment of TMDLs. The IDNR has stated that nearly all recent water quality data have already been used for Section 305(b) assessments and thus have already been considered for Section 303(d) listings. Also, a listed water body will not be removed from the state's Section 303(d) List simply because the data upon which the impairment was based have aged beyond five years.

All waters which were included in Iowa's approved 2012 CWA Section 303(d) List will remain on the state's CWA Section 303(d) list, unless the IDNR removes a water body from a future list and the EPA approves the removal. The IDNR's submittal for the EPA review includes an updated list reflecting, among other things:

- additional water bodies which the IDNR determined to be water quality-limited segments pursuant to the state's listing methodology and, therefore, included in the update of the CWA Section 303(d) List which the IDNR submitted to the EPA for review; and
- water bodies included on Iowa's previously approved 2010 CWA Section 303(d) List which were determined not to need TMDLs pursuant to the listing methodology and, therefore, removed from the update of the CWA Section 303(d) List submitted to the EPA for review.

While the guidelines, protocols, and requirements in state statute and the IDNR methodology might be useful tools for the IDNR to use in identifying impaired waters, they are not part of the state's water quality standards. Hence, the EPA did not rely solely on the statute or the methodology in reviewing Iowa'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 water quality standards. The EPA's review process generally followed a two-step analysis:

- 1) the EPA reviewed the state's listing methodology, including data collection and data assessment requirements, to determine whether, based on Iowa's 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 Region requested additional information from the IDNR to conduct further water body and data analysis.

Following the EPA's decision on Iowa's 2012 submission, the current CWA Section 303(d) List in the state of Iowa contains:

- approved removals from the 2010 CWA Section 303(d) List (Table 1); and
- an approved 2012 CWA Section 303(d) list with new listings identified (Table 2).

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

## **II. STATUTORY AND REGULATORY BACKGROUND**

### **A. Identification of Water Quality-limited Segments for Inclusion on the CWA 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 standard, 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, pursuant to the EPA's long-standing interpretation of Section 303(d).

The EPA regulations at 40 C.F.R. 130.7(b)(1) provide that states do not need to list waters where the following controls are adequate to implement applicable standards:

- technology-based effluent limitations required by the CWA;
- more stringent effluent limitations required by state or local authority; and
- other pollution control requirements required by state, local, or federal authority.

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

In developing Section 303(d) lists, states are required 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:

- waters identified as partially meeting or not meeting designated uses, or as threatened, in the state's most recent Section 305(b) report;
- waters for which dilution calculations or predictive modeling indicate non-attainment of applicable standards;
- waters for which water quality problems have been reported by governmental agencies, members of the public, or academic institutions; and
- waters identified as impaired or threatened in any Section 319 nonpoint assessment submitted to EPA (see 40 C.F.R. 130.7(b)(5)).

States are also required to consider any other data and information that is existing and readily available. The EPA's 1991 Guidance for Water Quality-Based Decisions describes categories of water quality related data and information that may be existing and readily available (see Guidance for Water Quality-Based Decisions, The TMDL Process, EPA Office of Water, 1991, Appendix C ("EPA's 1991 Guidance")). 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 C.F.R. 130.7(b)(6) require states to include as part of their submissions to the EPA, documentation to support decisions to rely or not to rely on particular data and information and decisions to list or not to list waters. Such documentation needs to include, at a minimum, the following information:

- a description of the methodology used to develop the list;
- a description of the data and information used to identify waters;
- a rationale for any decision to not use any existing and readily available data and information; and
- any other reasonable information requested by the Region.

## **C. Priority Ranking**

The EPA regulations also codify and interpret the requirement in the CWA, Section 303(d)(1)(A) of the Act, that states establish a priority ranking for listed waters. The regulations at 40 C.F.R. 130.7(b)(4) require states to prioritize waters on their Section 303(d) lists for TMDL development, and also to identify those water quality-limited segments (WQLS) 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 (see CWA Section 303(d)(1)(A)). As long as these factors are taken into account, the Act 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 FR 33040, 33045 [July 24, 1992], and the EPA's 1991 Guidance).

### **III. IOWA'S APPROACH TO IDENTIFYING WATERS FOR THE 2012 SECTION 303(D) LIST**

#### **A. Iowa's 2012 Integrated Report Format**

The EPA guidance for states in meeting the requirements of CWA Section 303(d) recommends a format which integrates the requirements of both CWA Sections 305(b) and 303(d) in creating a five category "integrated report" format. The 2012 Iowa submission under CWA Section 303(d) is the fifth submission by the state of Iowa using this "integrated report" format. Category 5 of the 2012 integrated report (IR) constitutes Iowa'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 includes water quality-limited segments still requiring TMDLs. The following describes the five categories constituting Iowa's IR and the number of water bodies assigned to each category by the IDNR. Under Iowa's five category system, most water bodies are assigned to one category. The information below regarding Categories 1-4 is provided for information purposes only, as the EPA does not approve Categories 1-4 but does approve Category 5.

Category 1 consists of 5 water body segments attaining all designated uses and no use is threatened.

Category 2 consists of 616 water body segments for which some, but not all, designated uses are attained and none are threatened. Attainment status of the remaining designated uses is unknown because data are insufficient to categorize a water body consistent with the state's listing methodology.

Category 3 consists of 1405 water body segments for which there are insufficient or no data and information to determine, consistent with the state's listing methodology, if any designated use is impaired or attained.

Category 4 consists of 191 water body segments for which one or more designated uses are impaired or threatened but establishment of a TMDL is not required.

Category 5 consists of 479 water body segments for which one or more pollutants has caused, is suspected of causing, or is projected to cause an impairment or threat of impairment of one or more designated uses and the establishment of a TMDL is required. This category also includes those segments for which impairment is indicated, but the cause or source is unknown and segments for which the impairment is to a presumed use. In total this category contains 602 impairments.

The state's IR format includes sub-categories within Categories 2, 3, 4 and 5. Only water body segments within Category 5 are subject to the EPA's approval. Within Categories 2 and 3, the IDNR has added Categories 2b and 3b which include those water body segments for which there is "evaluated data" which suggest a potential impairment. According to the IDNR's methodology, "waters 'evaluated' as impaired are identified as having insufficient data to determine whether beneficial uses are met." In short, those data determined by the IDNR to be "evaluated data" are not deemed by the IDNR to be of adequate quality or quantity to support a determination that a use designated within state water quality standards is or is not being met. Iowa's use of a category of "evaluated data" for statistical analysis is allowed in the EPA's guidance. Iowa uses this analysis to ensure statistical certainty before listing a water body segment as impaired. The 363 water body segments listed within Categories 2b and 3b where there is a potential impairment are placed by the IDNR on a list of waters in need of further investigation. This list serves to support the EPA's evaluation of the IDNR's data assessment process and its determination that all water quality-limited segments were listed by the IDNR in Category 5. Subcategories 2b and 3b are also subdivided into -c and -u. In the case of -c, a biological assessment has been conducted for a water body segment where the drainage area is within the range of calibration for the assessment protocol; -u indicates an assessment for a water body segment outside the calibration range.

The state's IR format also incorporates an expansion of Category 4 into four sub-categories. Sub-category 4a includes waters that are threatened or impaired, but for which a TMDL has been completed and approved. Sub-category 4b includes waters that are threatened or impaired, but for which "other required control measures are expected to result in the attainment of water quality standards." Sub-category 4c includes waters where the "threat or impairment is not caused by a pollutant." Sub-category 4d includes waters impaired by a fish kill but where enforcement actions have been taken against a responsible party. Sub-categories 4a through 4c are recognized within the EPA's guidance for the development of an integrated report. However, sub-category 4d constitutes a variation on the EPA's guidance. The EPA's review of the state categories and sub-categories was conducted within the context of whether or not a water body segment should be listed within Category 5 based on existing and readily available data and information.

The state's IR format also included four sub-categories within Category 5 which distinguish between whether the cause of impairment is known (Category 5a), the cause of impairment is unknown (Category 5b), or the cause of the impairment is presumptive pending the completion of use attainability analyses (Category 5p). Category 5b is further divided to subcategories -t and -v. In the case of -t, the water body segment is considered impaired but further sampling is needed to confirm the impairment; -v indicates an impairment validated by multiple assessments.

## **B. Iowa's 2012 Methodology**

The IDNR's "Methodology for Iowa's 2012 Water Quality Assessment, Listing, and Reporting Pursuant to Sections 305(b) and 303(d) of the Federal Clean Water Act," (March 22, 2012)," guides the IDNR's evaluation of "existing and readily available water quality-related data and information" (40 C.F.R. 130.7(b)(5)) and identification of "water quality-limited segments still requiring TMDLs" (40 C.F.R. 130.7(a). As described earlier, Category 5 of the 2012 list constitutes Iowa'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.

Changes in the IDNR's methodology include: 1) changes in the state's EPA-approved water quality standards for chloride, sulfate and default hardness criteria, 2) addition of Category 5i, 3) a new protocol

for assessing shallow lakes for turbidity, 4) use of a fish kill follow-up sampling procedure to determine recovery, and 5) assessment of bacterial impairment in lakes using a seasonal geometric mean in the manner in which streams are assessed in the state.

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

- 1) Physical, chemical, and biological data from ambient fixed station water quality monitoring networks conducted by the IDNR and other agencies (e.g., the U.S. Geological Survey, the U.S. Army Corps of Engineers);
- 2) Data from water quality monitoring conducted by adjacent states on border rivers and waters flowing into the state;
- 3) Data from biological monitoring being conducted by the IDNR in cooperation with the University of Iowa Hygienic Laboratory;
- 4) Data from IDNR-sponsored monitoring of shallow natural lakes;
- 5) Data from the IDNR-sponsored statewide lake monitoring project conducted by the Iowa State University and the University of Iowa Hygienic Laboratory;
- 6) Data from monitoring of bacterial indicators in rivers and at beaches of publicly-owned lakes;
- 7) Data from programs to monitor fish tissue for toxic contaminants;
- 8) Reports of pollutant-caused fish kills;
- 9) Data from state-wide survey of freshwater mussels;
- 10) Data, when available, from public water supplies on the quality of raw and finished water;
- 11) Drinking water source assessments under Section 1453 of the Safe Drinking Water Act;
- 12) Data from special studies of water quality and aquatic communities;
- 13) Best professional judgment of the IDNR staff;
- 14) Results of volunteer monitoring (e.g., by IOWATER trained volunteers); and
- 15) Water related information received from the public.

Additionally, sources of all existing and readily available water quality related data and information to be considered specifically for developing the state's 303(d) list include, but are not limited to, the following:

- 1) Iowa's most recent 305(b) report;
- 2) CWA Section 319 nonpoint source assessments;
- 3) Dilution calculations, trend analyses, or predictive models for determining the physical, chemical, or biological integrity of streams, rivers, lakes, and estuaries; and
- 4) Water quality related data and water related information from local, state, territorial, or federal agencies (especially the U.S. Geological Survey's National Water Quality Assessment Program and National Stream Quality Accounting Network), tribal governments, members of the public, and academic institutions.

### **C. Coordination with Other States on the Mississippi and Missouri Rivers**

The EPA's *Guidance for 2006 Assessment, Listing and Reporting Requirements Pursuant to Sections 303(d), 305(b) and 314 of the Clean Water Act* contains recommendations on how states should handle shared waters with regard to the sharing of water quality data, assessment decisions for those shared waters, and accounting for the listing decision inconsistencies between states. The guidance further recommends that the EPA Regional offices and Interstate Commissions, where applicable, should assist in resolving inconsistencies among states with shared waters, where they arise.

The IDNR's 2012 assessment methodology specifically addresses the IDNR's coordination efforts with other state agencies regarding data assembly and evaluation for "border rivers and waters flowing into the state." Due to a 2004 interstate agreement (memorandum of understanding) developed by the Upper Mississippi River Basin Association's Water Quality Task Force, the IDNR implemented the uniform assessment reaches for the Iowa reach of the Upper Mississippi River that are consistent with assessment reaches used by the adjacent states of Wisconsin and Illinois. Data from water quality monitoring conducted by adjacent states on border rivers and waters flowing into the state include data from: South Dakota, Minnesota, Wisconsin, Illinois, Missouri, and Nebraska. Data from fixed-station ambient water quality monitoring programs were used for purposes of water quality assessments in Iowa. These continuing efforts will improve states' efforts to satisfy the requirements of CWA Sections 303(d) and 305(b) for data assembly and evaluation for border rivers and waters flowing into the state.

## **IV. THE EPA'S ANALYSIS OF IOWA'S APPROACH TO LISTING WATERS FOR THE 2012 LIST**

The EPA is approving Iowa's 2012 CWA Section 303(d) List, based on the requirements of Section 303(d) of the CWA and 40 C.F.R. 130.7. The EPA's action is based on its analysis of whether the IDNR reasonably identified all water quality-limited segments requiring listing. In determining whether the IDNR reasonably identified all water quality-limited segments still needing a TMDL, the EPA first looked at the IDNR's use support determinations as documented in the state's ADB+ database.

The IDNR's 2012 assessment methodology identifies a general "cutoff date" as the end of calendar year 2010, for data collection in support of the IDNR's water quality data assessment. The EPA's guidance

recognizes the appropriateness of a reasonable data collection cutoff date allowing states to initiate actual data assessment and list preparation. Data not considered for the 2012 assessment should be considered for the 2014 submission. Despite the application of a “cutoff date” by the IDNR for the development of the 2012 list, the IDNR considered data submitted as part of the state’s public notice and comment period from January 15 through February 28, 2013. The EPA believes the IDNR complied with the requirements of federal regulations at 40 C.F.R. 130.7(b)(5) regarding the assembly and evaluation of all existing and readily available water quality-related data and information.

The 2012 assessment methodology also discusses the IDNR’s treatment of water quality-related data collected more than five years prior to the current assessment period. Federal regulations and guidance recognize that, in some instances, older data might not reflect current water quality conditions. Where the state demonstrates “good cause” for not including older data in the derivation of its list, federal regulations at 40 C.F.R. 130.7(b)(6)(iv) provide for the state not including a water or waters on its list. However, a demonstration of “good cause” relies on the state showing that there are changes in condition in the watershed or water body which result in older data not being representative of current water quality status. According to the IDNR’s 2012 methodology, recent water quality data have already been used for Section 305(b) assessments and thus have already been considered for Section 303(d) listings. There are no water bodies left off the list because the data were more than five years old. Also, a listed water body will not be removed from the state’s Section 303(d) list simply because the data upon which the impairment was based have aged beyond five years.

To confirm that Iowa’s CWA Section 303(d) List was developed in a manner compliant with the requirements at 40 C.F.R. 130.7 (regarding the assembly and evaluation of “all existing and readily available water quality-related data and information”), the EPA reviewed the information contained in the IDNR’s ADB+ database for all waters listed in Iowa’s Integrated Report Categories 5a, 5b, 5p, 5i, and all waters proposed for delisting.

## **V. THE EPA’S ANALYSIS OF CHANGES TO THE IOWA CWA SECTION 303(D) LIST**

The EPA compared waters listed in Category 5 of the state’s 2010 IR with waters listed in Category 5 of the state’s 2012 IR to determine whether waters were removed from the list, pollutants identified as causing impairment were changed, or water body descriptions had changed. In each case, such changes could constitute a change to the state’s CWA Section 303(d) List requiring the EPA’s approval. As described earlier in this document, Iowa’s 2012 CWA Section 303(d) List is a part of the state’s IR. The IR format is consistent with the EPA’s guidance and includes five categories of waters. Category 5 of the state’s IR constitutes the state’s 2012 CWA Section 303(d) List.

In its review of the state’s 2012 list, the EPA has reviewed Iowa’s description of the data and information the state relied upon in developing its list, its methodology for identifying water bodies and the IDNR’s responses to public comment. In accordance with 40 C.F.R. 130.7(d)(2), the EPA is approving Iowa’s 2012 CWA Section 303(d) List (Category 5 of their 2012 IR), consisting of a total of 479 water bodies with 602 water body/pollutant combinations.

Waters proposed by the IDNR for exclusion from Category 5 of Iowa’s 2012 CWA Section 303(d) List or for changes in their listing status which could be considered as a change to the CWA Section 303(d) list (e.g., segment description changed, listed causal pollutant changed) are identified below.

As a result of the IDNR's changes to the list of water bodies which were modified or removed from Iowa's CWA Section 303(d) list, the EPA initiated its review of 73 water bodies to determine whether the IDNR had "good cause" for modifying or not including these waters on its 2012 CWA Section 303(d) List.

#### **A. Waters Removed by IDNR from Iowa's CWA Section 303(d) List and Approved by EPA**

The EPA is approving the modification to or removal of 79 water body/pollutant combinations from the state's CWA Section 303(d) List consistent with the requirements of federal regulations at 40 C.F.R. 130.7(b)(6)(iv). Section 40 C.F.R. 130.7(b)(6)(iv) provides for the exclusion of waters from the state's CWA Section 303(d) list. These regulations require that the state "demonstrate good cause" for not including a water or waters on the list. The reasons for each delisting were included in the state's submittal, and additional details were provided to the EPA in the form of a responsiveness summary prior to the final section 303(d) list submittal. The following are the general reasons cited for removal of water bodies from the section 303(d) list:

- A TMDL has been approved by the EPA which addresses the cause of impairment.
- An enforcement action has been undertaken to address the cause of a fish kill.
- A water body is now meeting the state's EPA-approved water quality standards.

The rationale supporting the removal of these 79 water body/pollutant combinations from the state's list can be grouped into three general categories and are also identified below.

#### **1. Waters with Approved TMDLs or alternatives (31 waters)**

##### **a) TMDLs (27 water body/pollutant combinations)**

Twenty three water body segments are being removed from the state's list because TMDLs have been developed for those waters and approved by the EPA. In each instance, a TMDL has been developed for the listed pollutant or condition or the IDNR and the EPA have agreed that the TMDL will address the listed pollutant or condition. For some waters, they continue to be listed in Iowa's Category 5 for another pollutant or condition, or they are listed in another Category within Iowa's IR based on other water quality data. These waters are included in Table 1 with information regarding each TMDL described in the last column. Each water body and the rationale for moving it from Category 5 are listed below.

**Duck Creek (IA 01-NEM-0060\_1)** Iowa previously listed Duck Creek as impaired for indicator bacteria. On October 24, 2011, the EPA approved an Iowa TMDL for *Escherichia coli*. As such, this water body/pollutant pair is appropriate for removal from Iowa's § 303(d) List. In today's action, the EPA is approving the delisting of Duck Creek because it no longer requires the development of a TMDL for indicator bacteria, consistent with 40 C.F.R. 130.7(b).

**Duck Creek (IA 01-NEM-0060\_2)** Iowa previously listed Duck Creek as impaired for indicator bacteria. On October 24, 2011, the EPA approved an Iowa TMDL for *Escherichia coli*. As such, this water body/pollutant pair is appropriate for removal from Iowa's § 303(d) List. In today's action, the EPA is approving the delisting of Duck Creek because it no longer requires the development of a TMDL for indicator bacteria, consistent with 40 C.F.R. 130.7(b).

**Unnamed Creek (aka Pheasant Creek) (IA 01-NEM-0064\_0)** Iowa previously listed Pheasant Creek as impaired for indicator bacteria. On October 24, 2011, the EPA approved an Iowa TMDL for *Escherichia coli*. As such, this water body/pollutant pair is appropriate for removal from Iowa's § 303(d) List. In today's action, the EPA is approving the delisting of Pheasant Creek because it no longer requires the development of a TMDL for indicator bacteria, consistent with 40 C.F.R. 130.7(b).

**Goose Creek (IA 01-NEM-0065\_0)** Iowa previously listed Goose Creek as impaired for indicator bacteria. On October 24, 2011, the EPA approved an Iowa TMDL for *Escherichia coli*. As such, this water body/pollutant pair is appropriate for removal from Iowa's § 303(d) List. In today's action, the EPA is approving the delisting of Goose Creek because it no longer requires the development of a TMDL for indicator bacteria, consistent with 40 C.F.R. 130.7(b).

**Silver Creek (IA 01-NEM-0068\_1)** Iowa previously listed Silver Creek as impaired for indicator bacteria. On October 24, 2011, the EPA approved an Iowa TMDL for *Escherichia coli*. As such, this water body/pollutant pair is appropriate for removal from Iowa's § 303(d) List. In today's action, the EPA is approving the delisting of Silver Creek because it no longer requires the development of a TMDL for indicator bacteria, consistent with 40 C.F.R. 130.7(b).

**Yellow River (IA 01-YEL-0070\_0)** Iowa previously listed Yellow River as impaired for indicator bacteria. On February 25, 2013, the EPA approved an Iowa TMDL for *Escherichia coli*. As such, this water body/pollutant pair is appropriate for removal from Iowa's § 303(d) List. In today's action, the EPA is approving the delisting of Yellow River because it no longer requires the development of a TMDL for indicator bacteria, consistent with 40 C.F.R. 130.7(b).

**Yellow River (IA 01-YEL-0080\_2)** Iowa previously listed Yellow River as impaired for indicator bacteria. On February 25, 2013, the EPA approved an Iowa TMDL for *Escherichia coli*. As such, this water body/pollutant pair is appropriate for removal from Iowa's § 303(d) List. In today's action, the EPA is approving the delisting of Yellow River because it no longer requires the development of a TMDL for indicator bacteria, consistent with 40 C.F.R. 130.7(b). The Yellow River remains listed for biological integrity and low dissolved oxygen.

**Yellow River (IA 01-YEL-0080\_3)** Iowa previously listed Yellow River as impaired for indicator bacteria. On February 25, 2013, the EPA approved an Iowa TMDL for *Escherichia coli*. As such, this water body/pollutant pair is appropriate for removal from Iowa's § 303(d) List. In today's action, the EPA is approving the delisting of Yellow River because it no longer requires the development of a TMDL for indicator bacteria, consistent with 40 C.F.R. 130.7(b). The Yellow River remains listed for biological integrity.

**Dousman Creek (IA 01-YEL-0090\_0)** Iowa previously listed Dousman Creek as impaired for indicator bacteria. On February 25, 2013, the EPA approved an Iowa TMDL for *Escherichia coli*. As such, this water body/pollutant pair is appropriate for removal from Iowa's § 303(d) List. In today's action, the EPA is approving the delisting of Dousman Creek because it no longer requires the development of a TMDL for indicator bacteria, consistent with 40 C.F.R. 130.7(b). Dousman Creek remains listed for low dissolved oxygen.

**Suttle Creek (IA 01-YEL-0100\_0)** Iowa previously listed Suttle Creek as impaired for indicator bacteria. On February 25, 2013, the EPA approved an Iowa TMDL for *Escherichia coli*. As such, this water body/pollutant pair is appropriate for removal from Iowa's § 303(d) List. In today's

action, the EPA is approving the delisting of Suttle Creek because it no longer requires the development of a TMDL for indicator bacteria, consistent with 40 C.F.R. 130.7(b). Suttle Creek remains listed for low dissolved oxygen.

**Unnamed Creek (aka Bear Creek) (IA 01-YEL-0110\_0)** Iowa previously listed Bear Creek as impaired for indicator bacteria. On February 25, 2013, the EPA approved an Iowa TMDL for *Escherichia coli*. As such, this water body/pollutant pair is appropriate for removal from Iowa's § 303(d) List. In today's action, the EPA is approving the delisting of Bear Creek because it no longer requires the development of a TMDL for indicator bacteria, consistent with 40 C.F.R. 130.7(b). Bear Creek remains listed for low dissolved oxygen.

**Hickory Creek (IA 01-YEL-0120\_1)** Iowa previously listed Hickory Creek as impaired for indicator bacteria. On February 25, 2013, the EPA approved an Iowa TMDL for *Escherichia coli*. As such, this water body/pollutant pair is appropriate for removal from Iowa's § 303(d) List. In today's action, the EPA is approving the delisting of Hickory Creek because it no longer requires the development of a TMDL for indicator bacteria, consistent with 40 C.F.R. 130.7(b). Hickory Creek remains listed for low dissolved oxygen.

**Williams Creek (IA 01-YEL-0125\_0)** Iowa previously listed Williams Creek as impaired for indicator bacteria. On February 25, 2013, the EPA approved an Iowa TMDL for *Escherichia coli*. As such, this water body/pollutant pair is appropriate for removal from Iowa's § 303(d) List. In today's action, the EPA is approving the delisting of Williams Creek because it no longer requires the development of a TMDL for indicator bacteria, consistent with 40 C.F.R. 130.7(b).

**Norfolk Creek (IA 01-YEL-0130\_0)** Iowa previously listed Norfolk Creek as impaired for indicator bacteria. On February 25, 2013, the EPA approved an Iowa TMDL for *Escherichia coli*. As such, this water body/pollutant pair is appropriate for removal from Iowa's § 303(d) List. In today's action, the EPA is approving the delisting of Norfolk Creek because it no longer requires the development of a TMDL for indicator bacteria, consistent with 40 C.F.R. 130.7(b). Norfolk Creek remains listed for low dissolved oxygen.

**Unnamed Creek (IA 01-YEL-0150\_0)** Iowa previously listed Unnamed Creek as impaired for indicator bacteria. On February 25, 2013, the EPA approved an Iowa TMDL for *Escherichia coli*. As such, this water body/pollutant pair is appropriate for removal from Iowa's § 303(d) List. In today's action, the EPA is approving the delisting of Unnamed Creek because it no longer requires the development of a TMDL for indicator bacteria, consistent with 40 C.F.R. 130.7(b). Unnamed Creek remains listed for biological integrity.

**Unnamed Creek (aka Hecker Creek) (IA 01-YEL-0155\_0)** Iowa previously listed Hecker Creek as impaired for indicator bacteria. On February 25, 2013, the EPA approved an Iowa TMDL for *Escherichia coli*. As such, this water body/pollutant pair is appropriate for removal from Iowa's § 303(d) List. In today's action, the EPA is approving the delisting of Hecker Creek because it no longer requires the development of a TMDL for indicator bacteria, consistent with 40 C.F.R. 130.7(b). Hecker Creek remains listed for biological integrity and chloride.

**North Fork Yellow River (IA 01-YEL-0160\_0)** Iowa previously listed North Fork Yellow River as impaired for indicator bacteria. On February 25, 2013, the EPA approved an Iowa TMDL for *Escherichia coli*. As such, this water body/pollutant pair is appropriate for removal from Iowa's § 303(d) List. In today's action, the EPA is approving the delisting of North Fork

Yellow River because it no longer requires the development of a TMDL for indicator bacteria, consistent with 40 C.F.R. 130.7(b). North Fork Yellow River remains listed for low dissolved oxygen.

**Lake Keomah (IA 03-SSK-00120-L\_0)** Iowa previously listed Lake Keomah as impaired for pH and algal growth/chlorophyll *a*. On September 24, 2012, the EPA approved an Iowa TMDL for pH and algal growth/chlorophyll *a*. As such, these water body/pollutant pairs are appropriate for removal from Iowa's § 303(d) List. In today's action, the EPA is approving the delisting of Lake Keomah because it no longer requires the development of a TMDL for pH and algal growth/chlorophyll *a*, consistent with 40 C.F.R. 130.7(b). Lake Keomah remains listed for indicator bacteria and a new impairment for mercury in fish tissue.

**Geode Lake (IA 03-SKU-00650-L\_0)** Iowa previously listed Lake Geode as impaired for indicator bacteria and pH. On September 25, 2009, the EPA approved an Iowa TMDL for *Escherichia coli* and pH. As such, these water body/pollutant pairs are appropriate for removal from Iowa's § 303(d) List. In today's action, the EPA is approving the delisting of Geode Lake because it no longer requires the development of a TMDL for indicator bacteria or pH, consistent with 40 C.F.R. 130.7(b). Geode Lake remains listed for a new impairment for mercury in fish tissue.

**Black Hawk Lake (IA 04-RAC-0475-L\_0)** Iowa previously listed Black Hawk Lake as impaired for Secchi disk transparency and algal growth/chlorophyll *a*. On February 1, 2012, the EPA approved an Iowa TMDL for Secchi disk transparency and algal growth/chlorophyll *a*. As such, these water body/pollutant pairs are appropriate for removal from Iowa's § 303(d) List. In today's action, the EPA is approving the delisting of Black Hawk Lake because it no longer requires the development of a TMDL for Secchi disk transparency and algal growth/chlorophyll *a*, consistent with 40 C.F.R. 130.7(b).

**Big Creek Lake (IA 04-UDM-0140-L\_0)** Iowa previously listed Big Creek Lake as impaired for indicator bacteria. On August 24, 2011, the EPA approved an Iowa TMDL for *Escherichia coli*. As such, this water body/pollutant pair is appropriate for removal from Iowa's § 303(d) List. In today's action, the EPA is approving the delisting of Big Creek Lake because it no longer requires the development of a TMDL for indicator bacteria, consistent with 40 C.F.R. 130.7(b).

**Briggs Woods Lake (IA 04-UDM-01880-L\_0)** Iowa previously listed Briggs Woods Lake as impaired for fish kills (low dissolved oxygen) and algal growth/chlorophyll *a*. On August 30, 2012, the EPA approved an Iowa TMDL for fish kills (low dissolved oxygen) and algal growth/chlorophyll *a*. As such, these water body/pollutant pairs are appropriate for removal from Iowa's § 303(d) List. In today's action, the EPA is approving the delisting of Briggs Woods Lake because it no longer requires the development of a TMDL for fish kills (low dissolved oxygen) and algal growth/chlorophyll *a*, consistent with 40 C.F.R. 130.7(b). Briggs Woods Lake is newly listed for pH impairment.

**Lake of Three Fires (IA 05-PLA-00355-L\_0)** Iowa previously listed Lake of Three Fires as impaired for indicator bacteria. On April 1, 2011, the EPA approved an Iowa TMDL for *Escherichia coli*. As such, this water body/pollutant pair is appropriate for removal from Iowa's § 303(d) List. In today's action, the EPA is approving the delisting of Lake of Three Fires because it no longer requires the development of a TMDL for indicator bacteria, consistent with 40 C.F.R. 130.7(b).

**b) Other pollution control requirements (nine waters listed by water body identification number)**

Nine water bodies are being removed from the state's list because restitution has been sought for the original fish kill which led to their listing and there have been no additional fish kills in these segments:

**Unnamed Tributary to Crane Creek (IA 01-WPS-0183\_0)** Iowa previously listed Unnamed Tributary to Crane Creek as impaired because of fish kills. A responsible party was identified and restitution was sought and received for the fish kill, caused by runoff of fertilizer through a storm drain. In today's action, the EPA is approving the delisting of Unnamed Tributary to Crane Creek because it no longer requires the development of a TMDL for fish kills, consistent with 40 C.F.R. 130.7(b).

**Buck Creek (IA 01-YEL-0020\_2)** Iowa previously listed Buck Creek as impaired because of fish kills. A responsible party was identified and restitution was sought and received for the fish kill, caused by runoff of pesticide and potential runoff from an open cattle feedlot. In today's action, the EPA is approving the delisting of Buck Creek because it no longer requires the development of a TMDL for fish kills, consistent with 40 C.F.R. 130.7(b).

**Buck Creek (IA 01-YEL-0021\_0)** Iowa previously listed Buck Creek as impaired because of fish kills. A responsible party was identified and restitution was sought and received for the fish kill, caused by runoff of pesticide and potential runoff from an open cattle feedlot. In today's action, the EPA is approving the delisting of Buck Creek because it no longer requires the development of a TMDL for fish kills, consistent with 40 C.F.R. 130.7(b).

**Flint Creek (IA 02-ICD-0020\_3)** Iowa previously listed Flint Creek as impaired because of fish kills. A responsible party was identified and restitution was sought and received for the fish kill, caused by aerial spraying of pesticides. In today's action, the EPA is approving the delisting of Flint Creek because it no longer requires the development of a TMDL for fish kills, consistent with 40 C.F.R. 130.7(b).

**Flint Creek (IA 02-ICD-0021\_0)** Iowa previously listed Flint Creek as impaired because of fish kills. A responsible party was identified and restitution was sought and received for the fish kill, caused by aerial spraying of pesticides. In today's action, the EPA is approving the delisting of Flint Creek because it no longer requires the development of a TMDL for fish kills, consistent with 40 C.F.R. 130.7(b).

**Picayune Creek (IA 02-IOW-0152\_0)** Iowa previously listed Picayune Creek as impaired because of fish kills. A responsible party was identified and restitution was sought and received for the fish kill, caused by runoff from a dairy operation. In today's action, the EPA is approving the delisting of Picayune Creek because it no longer requires the development of a TMDL for fish kills, consistent with 40 C.F.R. 130.7(b).

**Unnamed Tributary to Picayune Creek (IA 02-IOW-01525\_0)** Iowa previously listed Unnamed Tributary to Picayune Creek as impaired because of fish kills. A responsible party was identified and restitution was sought and received for the fish kill, caused by runoff from a dairy operation. In today's action, the EPA is approving the delisting of Unnamed Tributary to

Picayune Creek because it no longer requires the development of a TMDL for fish kills, consistent with 40 C.F.R. 130.7(b).

**Winnebago River (IA 02-WIN-0020\_1)** Iowa previously listed Winnebago River as impaired because of fish kills. A responsible party was identified and restitution was sought and received for the fish kill, caused by runoff from a silage storage area. In today's action, the EPA is approving the delisting of Winnebago River because it no longer requires the development of a TMDL for fish kills, consistent with 40 C.F.R. 130.7(b).

**Big Creek (IA 03-SKU-0080\_3)** Iowa previously listed Big Creek as impaired because of fish kills. A responsible party was identified and restitution was sought and received for the fish kill, caused by a spill of liquid manure from a dairy operation. In today's action, the EPA is approving the delisting of Big Creek because it no longer requires the development of a TMDL for fish kills, consistent with 40 C.F.R. 130.7(b).

**South Big Creek (IA 03-SKU-0081\_0)** Iowa previously listed South Big Creek as impaired because of fish kills. A responsible party was identified and restitution was sought and received for the fish kill, caused by a spill of liquid manure from a dairy operation. In today's action, the EPA is approving the delisting of South Big Creek because it no longer requires the development of a TMDL for fish kills, consistent with 40 C.F.R. 130.7(b).

**Unnamed Tributary to Indian Creek (IA 03-SKU-0174\_0)** Iowa previously listed Unnamed Tributary to Indian Creek as impaired because of fish kills. A responsible party was identified and restitution was sought and received for the fish kill, caused by failure of a manure storage device. The result was waste reaching the water body through a drainage tile. In today's action, the EPA is approving the delisting of Unnamed Tributary to Indian Creek because it no longer requires the development of a TMDL for fish kills, consistent with 40 C.F.R. 130.7(b).

**Rose Creek (IA 05-NOD-0115\_0)** Iowa previously listed Rose Creek as impaired because of fish kills. A responsible party was identified and restitution was sought and received for the fish kill, caused by runoff from a truck wash facility release. In today's action, the EPA is approving the delisting of Rose Creek because it no longer requires the development of a TMDL for fish kills, consistent with 40 C.F.R. 130.7(b).

**Unnamed Tributary to Mud Creek (IA 06-BSR-0081\_0)** Iowa previously listed Unnamed Tributary to Mud Creek as impaired because of fish kills. A responsible party was identified and restitution was sought and received for the fish kill, caused by runoff of a pipe leak entering a tile drain. In today's action, the EPA is approving the delisting of Unnamed Tributary to Mud Creek because it no longer requires the development of a TMDL for fish kills, consistent with 40 C.F.R. 130.7(b).

## 2. New Data Supports Change in Listing (43 water body/pollutant combinations)

Forty two water body segments are being removed from the state's list based on new water quality data which indicates the use is supported with regard to the previously specified pollutants or new assessment protocols still consistent with the state's EPA-approved water quality standards (WQS). One water body is being delisted for two pollutants.

**Rock Creek (IA 01-MAQ-0010\_1)** Iowa previously listed the Rock Creek as impaired by low dissolved oxygen. New monitoring data indicates this water body is attaining Iowa's EPA-approved WQS for dissolved oxygen. As such, this water body/pollutant pair is appropriate for removal from Iowa's § 303(d) List. In today's action, the EPA is approving the delisting of the Rock Creek because it no longer requires the development of a TMDL for dissolved oxygen, consistent with 40 C.F.R. 130.7(b).

**Lake of the Hills (IA 01-NEM-00160-L\_0)** Iowa previously listed Lake of the Hills as impaired by indicator bacteria. New monitoring data indicates this water body is attaining Iowa's EPA-approved WQS for indicator bacteria. As such, this water body/pollutant pair is appropriate for removal from Iowa's § 303(d) List. In today's action, the EPA is approving the delisting of the Lake of the Hills because it no longer requires the development of a TMDL for indicator bacteria, consistent with 40 C.F.R. 130.7(b). Lake of the Hills remains listed for algal growth/chlorophyll *a*.

**Mississippi River (IA 01-NEM-0020\_1)** Iowa previously listed Mississippi River as impaired by mercury in fish tissue. New monitoring data indicates this water body is attaining Iowa's EPA-approved WQS for mercury in fish tissue. As such, this water body/pollutant pair is appropriate for removal from Iowa's § 303(d) List. In today's action, the EPA is approving the delisting of the Mississippi River because it no longer requires the development of a TMDL for mercury in fish tissue, consistent with 40 C.F.R. 130.7(b).

**Mississippi River (IA 01-NEM-0020\_2)** Iowa previously listed Mississippi River as impaired by mercury in fish tissue. New monitoring data indicates this water body is attaining Iowa's EPA-approved WQS for mercury in fish tissue. As such, this water body/pollutant pair is appropriate for removal from Iowa's § 303(d) List. In today's action, the EPA is approving the delisting of the Mississippi River because it no longer requires the development of a TMDL for mercury in fish tissue, consistent with 40 C.F.R. 130.7(b).

**Roberts Creek (IA 01-TRK-0360\_3)** Iowa previously listed Roberts Creek as impaired for a lack of biological integrity. Biological monitoring from 2008 and 2009 indicates this water body is attaining Iowa's EPA-approved WQS for biological integrity. As such, this water body/pollutant pair is appropriate for removal from Iowa's § 303(d) List. In today's action, the EPA is approving the delisting of Roberts Creek because it no longer requires the development of a TMDL for biological integrity, consistent with 40 C.F.R. 130.7(b).

**Paint Creek (IA 01-UIA-0010\_1)** Iowa previously listed Paint Creek as impaired for a lack of biological integrity. Monitoring data from 2007, 2010 and 2011 indicates this water body is attaining Iowa's EPA-approved WQS for biological integrity. As such, this water body/pollutant pair is appropriate for removal from Iowa's § 303(d) List. In today's action, the EPA is approving the delisting of Paint Creek because it no longer requires the development of a TMDL for biological integrity, consistent with 40 C.F.R. 130.7(b).

**Upper Iowa River (IA 01-UIA-0110\_3)** Iowa previously listed Upper Iowa River as impaired for a lack of biological integrity. Freshwater mussel monitoring data from 2012 indicates this water body is attaining Iowa's EPA-approved WQS for biological integrity. As such, this water body/pollutant pair is appropriate for removal from Iowa's § 303(d) List. In today's action, the EPA is approving the delisting of Upper Iowa River because it no longer requires the development of a TMDL for biological integrity, consistent with 40 C.F.R. 130.7(b).

**Frog Hollow (aka Volga Lake) (IA 01-VOL-00130-L\_0)** Iowa previously listed Frog Hollow as impaired by pH. New monitoring data indicates this water body is attaining Iowa's EPA-approved WQS for pH. As such, this water body/pollutant pair is appropriate for removal from Iowa's § 303(d) List. In today's action, the EPA is approving the delisting of Frog Hollow because it no longer requires the development of a TMDL for pH, consistent with 40 C.F.R. 130.7(b). Frog Hollow remains listed for algal growth/chlorophyll *a* and a new impairment for Secchi disk transparency.

**Wapsipinicon River (IA 01-WPS-0010\_5)** Iowa previously listed Wapsipinicon River as impaired for a lack of biological integrity. Freshwater mussel monitoring data from 2012 indicates this water body is attaining Iowa's EPA-approved WQS for biological integrity. As such, this water body/pollutant pair is appropriate for removal from Iowa's § 303(d) List. In today's action, the EPA is approving the delisting of Wapsipinicon River because it no longer requires the development of a TMDL for biological integrity, consistent with 40 C.F.R. 130.7(b). Wapsipinicon River remains listed for indicator bacteria.

**Wapsipinicon River (IA 01-WPS-0020\_6)** Iowa previously listed Wapsipinicon River as impaired for a lack of biological integrity. Freshwater mussel monitoring data from 2012 indicates this water body is attaining Iowa's EPA-approved WQS for biological integrity. As such, this water body/pollutant pair is appropriate for removal from Iowa's § 303(d) List. In today's action, the EPA is approving the delisting of Wapsipinicon River because it no longer requires the development of a TMDL for biological integrity, consistent with 40 C.F.R. 130.7(b).

**Wapsipinicon River (IA 01-WPS-0030\_1)** Iowa previously listed Wapsipinicon River as impaired for a lack of biological integrity. Biological monitoring from 2004 and 2010 and freshwater mussel monitoring from 2012 indicates this water body is attaining Iowa's EPA-approved WQS for biological integrity. As such, this water body/pollutant pair is appropriate for removal from Iowa's § 303(d) List. In today's action, the EPA is approving the delisting of Wapsipinicon River because it no longer requires the development of a TMDL for biological integrity, consistent with 40 C.F.R. 130.7(b).

**Cedar Bend Lake (IA 02-CED-00210-L\_0)** Iowa previously listed Cedar Bend Lake as impaired by polychlorinated biphenyls in fish tissue. New monitoring data indicates this water body is attaining Iowa's EPA-approved WQS for PCBs in fish tissue. As such, this water body/pollutant pair is appropriate for removal from Iowa's § 303(d) List. In today's action, the EPA is approving the delisting of Cedar Bend Lake because it no longer requires the development of a TMDL for PCBs in fish tissue, consistent with 40 C.F.R. 130.7(b).

**Lime Creek (IA 02-CED-0270\_1)** Iowa previously listed Lime Creek as impaired for a lack of biological integrity. Freshwater mussel monitoring data from 2007, 2009 and 2010 indicates this water body is attaining Iowa's EPA-approved WQS for biological integrity. As such, this water body/pollutant pair is appropriate for removal from Iowa's § 303(d) List. In today's action, the EPA is approving the delisting of Lime Creek because it no longer requires the development of a TMDL for biological integrity, consistent with 40 C.F.R. 130.7(b). Lime Creek remains listed for indicator bacteria.

**Unnamed Creek (aka Drainage Ditch 3) (IA 02-CED-0505\_1)** Iowa previously listed Drainage Ditch 3 as impaired because of fish kills. An August 2011 follow-up fish survey indicated the fish community had recovered from the fish kill event. As such, this water body/pollutant pair is appropriate for removal from Iowa's § 303(d) List. In today's action, the EPA is approving the delisting of Drainage Ditch 3 because it no longer requires the development of a TMDL for fish kills, consistent with 40 C.F.R. 130.7(b).

**Mississippi River (IA 02-ICM-0010\_1)** Iowa previously listed Mississippi River as impaired by indicator bacteria based on a listing by the state of Illinois. Illinois' monitoring data (IL\_K-22) indicates this water body is attaining its EPA-approved WQS for indicator bacteria. As such, this water body/pollutant pair is appropriate for removal from Iowa's § 303(d) List. In today's action, the EPA is approving the delisting of Mississippi River because it no longer requires the development of a TMDL for indicator bacteria, consistent with 40 C.F.R. 130.7(b).

**Mississippi River (IA 02-ICM-0010\_2)** Iowa previously listed Mississippi River as impaired by indicator bacteria based on a listing by the state of Illinois. Illinois' monitoring data (IL\_K-22) indicates this water body is attaining its EPA-approved WQS for indicator bacteria. As such, this water body/pollutant pair is appropriate for removal from Iowa's § 303(d) List. In today's action, the EPA is approving the delisting of Mississippi River because it no longer requires the development of a TMDL for indicator bacteria, consistent with 40 C.F.R. 130.7(b). Mississippi River remains listed for aluminum and arsenic and a new impairment of cadmium.

**Iowa River (IA 02-IOW-0030\_1)** Iowa previously listed Iowa River as impaired for a lack of biological integrity. Freshwater mussel monitoring data from 2011 and 2012 indicates this water body is attaining Iowa's EPA-approved WQS for biological integrity. As such, this water body/pollutant pair is appropriate for removal from Iowa's § 303(d) List. In today's action, the EPA is approving the delisting of the Iowa River because it no longer requires the development of a TMDL for biological integrity, consistent with 40 C.F.R. 130.7(b). Iowa River remains listed for indicator bacteria.

**Iowa Lake (IA 02-IOW-01150-L\_0)** Iowa previously listed Iowa Lake as impaired by pH. New monitoring data indicates this water body is attaining Iowa's EPA-approved WQS for pH. As such, this water body/pollutant pair is appropriate for removal from Iowa's § 303(d) List. In today's action, the EPA is approving the delisting of Iowa Lake because it no longer requires the development of a TMDL for pH, consistent with 40 C.F.R. 130.7(b). Iowa Lake remains listed for algal growth/chlorophyll *a* and for the new impairment of indicator bacteria.

**Unnamed Tributary to Drainage Ditch 55 (IA 02-IOW-02611\_0)** Iowa previously listed Unnamed Tributary to Drainage Ditch 55 as impaired because of fish kills. An October 2011 follow-up fish survey indicated the fish community had recovered from the fish kill event. As such, this water body/pollutant pair is appropriate for removal from Iowa's § 303(d) List. In today's action, the EPA is approving the delisting of the Unnamed Tributary to Drainage Ditch 55 because it no longer requires the development of a TMDL for fish kills, consistent with 40 C.F.R. 130.7(b).

**Crystal Lake (IA 02-IOW-04095-L\_0)** Iowa previously listed Crystal Lake as impaired by indicator bacteria. New monitoring data indicates this water body is attaining Iowa's EPA-approved WQS for indicator bacteria. As such, this water body/pollutant pair is appropriate for removal from Iowa's § 303(d) List. In today's action, the EPA is approving the delisting of Crystal Lake because it no longer requires the development of a TMDL for indicator bacteria, consistent with 40 C.F.R. 130.7(b).

**Coal Creek (IA 03-NSK-0039\_0)** Iowa previously listed Coal Creek as impaired because of fish kills. A September 2011 follow-up fish survey indicated the fish community had recovered from the 2003 fish kill event. As such, this water body/pollutant pair is appropriate for removal from Iowa's § 303(d) List. In today's action, the EPA is approving the delisting of Coal Creek because it no longer requires the development of a TMDL for fish kills, consistent with 40 C.F.R. 130.7(b).

**Mississippi River (IA 03-SKM-0010\_1)** Iowa previously listed Mississippi River as impaired by indicator bacteria based on a listing by the state of Illinois. Illinois' monitoring data (IL\_K-22) indicates this water body is attaining its EPA-approved WQS for indicator bacteria. As such, this water body/pollutant pair is appropriate for removal from Iowa's § 303(d) List. In today's action, the EPA is approving the delisting of Mississippi River because it no longer requires the development of a TMDL for indicator bacteria, consistent with 40 C.F.R. 130.7(b). This Mississippi River segment remains listed for aluminum, arsenic and cadmium.

**Mississippi River (IA 03-SKM-0010\_2)** Iowa previously listed Mississippi River as impaired by indicator bacteria based on a listing by the state of Illinois. Illinois' monitoring data (IL\_K-22) indicates this water body is attaining its EPA-approved WQS for indicator bacteria. As such, this water body/pollutant pair is appropriate for removal from Iowa's § 303(d) List. In today's action, the EPA is approving the delisting of Mississippi River because it no longer requires the development of a TMDL for indicator bacteria, consistent with 40 C.F.R. 130.7(b).

**Walton Reservoir (IA 03-SKU-00945-L\_0)** Iowa previously listed Walton Reservoir as impaired by atrazine. New monitoring data indicates this water body is attaining Iowa's EPA-approved WQS for atrazine. As such, this water body/pollutant pair is appropriate for removal from Iowa's § 303(d) List. In today's action, the EPA is approving the delisting of Walton Reservoir because it no longer requires the development of a TMDL for atrazine, consistent with 40 C.F.R. 130.7(b).

**West Fork Crooked River (IA 03-SKU-0130\_0)** Iowa previously listed West Fork Crooked River as impaired because of fish kills. An October 2010 follow-up fish survey indicated the fish community had recovered from the 2002 fish kill event. As such, this water body/pollutant pair is appropriate for removal from Iowa's § 303(d) List. In today's action, the EPA is approving the delisting of the West Fork Crooked River because it no longer requires the development of a TMDL for fish kills, consistent with 40 C.F.R. 130.7(b).

**Lake Darling (IA 03-SKU-01450-L\_0)** Iowa previously listed Lake Darling as impaired by indicator bacteria. New monitoring data indicates this water body is attaining Iowa's EPA-approved WQS for indicator bacteria. As such, this water body/pollutant pair is appropriate for removal from Iowa's § 303(d) List. In today's action, the EPA is approving the delisting of Lake Darling because it no longer requires the development of a TMDL for indicator bacteria, consistent with 40 C.F.R. 130.7(b).

**Red Rock Reservoir (IA 04-LDM-0030-L\_0)** Iowa previously listed Red Rock Reservoir as impaired by indicator bacteria. New monitoring data indicates this water body is attaining Iowa's EPA-approved WQS for indicator bacteria. As such, this water body/pollutant pair is appropriate for removal from Iowa's § 303(d) List. In today's action, the EPA is approving the delisting of Red Rock Reservoir because it no longer requires the development of a TMDL for indicator bacteria, consistent with 40 C.F.R. 130.7(b). Red Rock Reservoir remains listed for Secchi disk transparency.

**White Breast Creek (IA 04-LDM-0200\_0)** Iowa previously listed White Breast Creek as impaired by low dissolved oxygen. New monitoring data indicates this water body is attaining Iowa's EPA-approved WQS for dissolved oxygen. As such, this water body/pollutant pair is appropriate for removal from Iowa's § 303(d) List. In today's action, the EPA is approving the delisting of White Breast Creek because it no longer requires the development of a TMDL for dissolved oxygen, consistent with 40 C.F.R. 130.7(b). White Breast Creek remains listed for biological integrity and indicator bacteria.

**Black Hawk Lake (IA 04-RAC-00475-L\_0)** Iowa previously listed Black Hawk Lake as impaired by indicator bacteria. Monitoring data indicates this water body is attaining Iowa's EPA-approved WQS for indicator bacteria. As such, this water body/pollutant pair is appropriate for removal from Iowa's § 303(d) List. In today's action, the EPA is approving the delisting of Black Hawk Lake because it no longer requires the development of a TMDL for indicator bacteria, consistent with 40 C.F.R. 130.7(b).

**Mosquito Creek (IA 04-RAC-02401\_0)** Iowa previously listed Mosquito Creek as impaired because of fish kills. An August 2011 follow-up fish survey indicated the fish community had recovered from the 2003 fish kill event. As such, this water body/pollutant pair is appropriate for removal from Iowa's § 303(d) List. In today's action, the EPA is approving the delisting of Mosquito Creek because it no longer requires the development of a TMDL for fish kills, consistent with 40 C.F.R. 130.7(b).

**Don Williams Lake (IA 04-UDM-01650-L\_0)** Iowa previously listed Don Williams Lake as impaired by indicator bacteria. Monitoring data indicates this water body is attaining Iowa's EPA-approved WQS for indicator bacteria. As such, this water body/pollutant pair is appropriate for removal from Iowa's § 303(d) List. In today's action, the EPA is approving the delisting of

Don Williams Lake because it no longer requires the development of a TMDL for indicator bacteria, consistent with 40 C.F.R. 130.7(b).

**Boone River (IA 04-UDM-0180\_1)** Iowa previously listed Boone River as impaired by indicator bacteria. New monitoring data indicates this water body is attaining Iowa's EPA-approved WQS for indicator bacteria. As such, this water body/pollutant pair is appropriate for removal from Iowa's § 303(d) List. In today's action, the EPA is approving the delisting of Boone River because it no longer requires the development of a TMDL for indicator bacteria, consistent with 40 C.F.R. 130.7(b).

**Four mile Lake (IA 04-UDM-0510-L\_0)** Iowa previously listed Fourmile Lake as impaired for Secchi disk transparency. A change in the narrative translation of Iowa's EPA-approved water quality standards for shallow lakes has resulted in this water body attaining its designated use for this pollutant cause. As such, this water body/pollutant pair is appropriate for removal from Iowa's § 303(d) List. In today's action, the EPA is approving the delisting of Four mile Lake because it no longer requires the development of a TMDL for Secchi disk transparency, consistent with 40 C.F.R. 130.7(b). Four mile Lake remains listed for algal growth/chlorophyll *a*.

**Little River Watershed Lake (IA 05-GRA-00810-L\_0)** Iowa previously listed Little River Watershed Lake as impaired for algal growth/chlorophyll *a*. Monitoring data indicates this water body is attaining Iowa's EPA-approved WQS for algal growth/chlorophyll *a*. As such, this water body/pollutant pair is appropriate for removal from Iowa's § 303(d) List. In today's action, the EPA is approving the delisting of Little River Watershed Lake because it no longer requires the development of a TMDL for algal growth/chlorophyll *a*, consistent with 40 C.F.R. 130.7(b). Little River Watershed Lake remains listed for Secchi disk transparency.

**Loch Ayr (IA 05-GRA-01920-L\_0)** Iowa previously listed Loch Ayr as impaired by atrazine. New monitoring data indicates this water body is attaining Iowa's EPA-approved WQS for atrazine. As such, this water body/pollutant pair is appropriate for removal from Iowa's § 303(d) List. In today's action, the EPA is approving the delisting of Loch Ayr because it no longer requires the development of a TMDL for atrazine, consistent with 40 C.F.R. 130.7(b).

**Mormon Trail Lake (IA 05-NOD-00820-L\_0)** Iowa previously listed Mormon Trail Lake as impaired by indicator bacteria and pH. Monitoring data indicates this water body is attaining Iowa's EPA-approved WQS for both indicator bacteria and pH. As such, these water body/pollutant pairs are appropriate for removal from Iowa's § 303(d) List. In today's action, the EPA is approving the delisting of Mormon Trail Lake because it no longer requires the development of a TMDL for either indicator bacteria or pH, consistent with 40 C.F.R. 130.7(b). Mormon Trail Lake remains listed for mercury in fish tissue.

**Davids Creek (IA 05-NSH-0063\_0)** Iowa previously listed Davids Creek as impaired because of fish kills. An August 2011 follow-up fish survey indicated the fish community had recovered from the 2004 fish kill event. As such, this water body/pollutant pair is appropriate for removal from Iowa's § 303(d) List. In today's action, the EPA is approving the delisting of Davids Creek because it no longer requires the development of a TMDL for fish kills, consistent with 40 C.F.R. 130.7(b).

**Willow Lake (IA 06-BOY-00405-L\_0)** Iowa previously listed Willow Lake as impaired by indicator bacteria. Monitoring data indicates this water body is attaining Iowa's EPA-approved WQS for indicator bacteria. As such, this water body/pollutant pair is appropriate for removal from Iowa's § 303(d) List. In today's action, the EPA is approving the delisting of Willow Lake because it no longer requires the development of a TMDL for indicator bacteria, consistent with 40 C.F.R. 130.7(b).

**Lake Pahoja (IA 06-BSR-00280-L\_0)** Iowa previously listed Lake Pahoja as impaired by indicator bacteria. Monitoring data indicates this water body is attaining Iowa's EPA-approved WQS for indicator bacteria. As such, this water body/pollutant pair is appropriate for removal from Iowa's § 303(d) List. In today's action, the EPA is approving the delisting of Lake Pahoja because it no longer requires the development of a TMDL for indicator bacteria, consistent with 40 C.F.R. 130.7(b). Lake Pahoja remains listed for algal growth/chlorophyll *a*.

**Crawford Creek Impoundment (IA 06-LSR-00790-L\_0)** Iowa previously listed Crawford Creek Impoundment as impaired by algal growth/chlorophyll *a*. Monitoring data indicates this water body is attaining Iowa's EPA-approved WQS for algal growth/chlorophyll *a*. As such, this water body/pollutant pair is appropriate for removal from Iowa's § 303(d) List. In today's action, the EPA is approving the delisting of Crawford Creek Impoundment because it no longer requires the development of a TMDL for algal growth/chlorophyll *a*, consistent with 40 C.F.R. 130.7(b).

**Odebolt Creek (IA 06-LSR-0101\_0)** Iowa previously listed Odebolt Creek as impaired because of fish kills. An October 2011 follow-up fish survey indicated the fish community had recovered from the 2006 fish kill event. As such, this water body/pollutant pair is appropriate for removal from Iowa's § 303(d) List. In today's action, the EPA is approving the delisting of Odebolt Creek because it no longer requires the development of a TMDL for fish kills, consistent with 40 C.F.R. 130.7(b).

**Center Lake (IA 06-LSR-02890-L\_0)** Iowa previously listed Center Lake as impaired by pH. Monitoring data indicates this water body is attaining Iowa's EPA-approved WQS for pH. As such, this water body/pollutant pair is appropriate for removal from Iowa's § 303(d) List. In today's action, the EPA is approving the delisting of Center Lake because it no longer requires the development of a TMDL for pH, consistent with 40 C.F.R. 130.7(b).

The EPA concludes that the state properly assembled and considered all existing and readily available data and information for the water bodies identified above, including all of the existing and readily available data and information relating to the categories of waters specified in 40 C.F.R. 130.7(b)(5). Therefore, the EPA concludes that the state's decision to delist the above waters identified in its listing submittal is consistent with federal listing requirements.

## **VI. PRIORITY RANKING IN IOWA'S CWA SECTION 303(D) LIST**

The IDNR's listing methodology describes how the state will prioritize water bodies for purposes of establishing TMDLs. Iowa's submission of its 2012 CWA Section 303(d) List included a priority ranking of each water body as required in Section 303(d)(1)(A) of the CWA and 40 C.F.R. 130.7(b)(4) of the EPA's implementing regulations.

## **VII. IOWA'S PUBLIC PARTICIPATION PROCESS**

The IDNR public noticed its 2012 draft CWA Section 303(d) List from January 15 through February 28, 2013. The list and the IDNR's ADB+ water quality database were also made available for public review and comment through the IDNR website. The IDNR received comments from the EPA and one group. A responsiveness summary was submitted by the state with its 2012 IR. The IDNR finalized its 2012 CWA Section 303(d) List and submitted it for approval on March 25, 2013; it was received by the EPA on April 1, 2013.

The EPA has reviewed Iowa's public participation process and has concluded that the state provided adequate public notice and opportunity for the public to comment on its decision regarding the CWA Section 303(d) list in compliance with federal requirements.

### **Iowa's 2012 303(d) List**

Table 1 lists each modification or water body approved for the addition to, or removal from, the state's CWA Section 303(d) list and the supporting rationale for each. Table 2 identifies the Iowa § 303 (d) list as approved by the EPA.

**Table 1.** 2012 Changes from the EPA-approved 2010 Iowa § 303(d) List.

ADB Code	Water body Name	Cause of 303(d) listing	Listing/De-listing Rationale	New Listing
<b>Northeastern Iowa River Basins</b>				
IA 01-MAQ-0010_1	Rock Creek	Low Dissolved Oxygen	Two consecutive listing cycles with <10% of samples violating WQ criterion	
IA 01-MAQ-0050_2	Maquoketa River	<i>Escherichia coli</i>	Geometric mean of indicator bacteria greater than criterion.	Y
IA 01-NEM-00160-L_0	Lake of the Hills	<i>Escherichia coli</i>	Two consecutive listing cycles with levels of indicator bacteria below WQ criteria.	
IA 01-NEM-0010_4	Mississippi River	Cadmium	Cadmium concentrations above Iowa criterion.	Y
IA 01-NEM-0020_1	Mississippi River	Fish advisories-Mercury	Monitoring in 2009 and 2010 show mercury levels below advisory threshold.	
IA 01-NEM-0020_2	Mississippi River	Fish advisories-Mercury	Monitoring in 2009 and 2010 show mercury levels below advisory threshold.	
IA 01-NEM-0030_1	Mississippi River	Cadmium	Cadmium concentrations above Iowa criterion.	Y
IA 01-NEM-0060_1	Duck Creek	<i>Escherichia coli</i>	A TMDL for bacterial impairment was approved by the EPA in 2011.	
IA 01-NEM-0060_2	Duck Creek	<i>Escherichia coli</i>	A TMDL for bacterial impairment was approved by the EPA in 2011.	
IA 01-NEM-0064_0	Unnamed Creek (aka Pheasant Creek)	<i>Escherichia coli</i>	A TMDL for bacterial impairment was approved by the EPA in 2011.	
IA 01-NEM-0065_0	Goose Creek	<i>Escherichia coli</i>	A TMDL for bacterial impairment was approved by the EPA in 2011.	
IA 01-NEM-0068_1	Silver Creek	<i>Escherichia coli</i>	A TMDL for bacterial impairment was approved by the EPA in 2011.	
IA 01-NMQ-0080_0	Prairie Creek	Fish Kill(s)	Fish kill in 2010 caused by animal waste.	Y
IA 01-NMQ-0083_0	Unnamed Tributary to Prairie Creek	Fish Kill(s)	Fish kill in 2010 caused by animal waste.	Y

IA 01-TRK-0090_1	Tetes Des Morts Creek	<i>Escherichia coli</i>	Geometric mean of indicator bacteria greater than criterion.	Y
IA 01-TRK-0090_2	Tetes Des Morts Creek	<i>Escherichia coli</i>	Geometric mean of indicator bacteria greater than criterion.	Y
IA 01-TRK-0095_0	Lux Creek	<i>Escherichia coli</i>	Geometric mean of indicator bacteria greater than criterion.	Y
IA 01-TRK-0100_1	Catfish Creek	<i>Escherichia coli</i>	Geometric mean of indicator bacteria greater than criterion.	Y
IA 01-TRK-0100_2	Catfish Creek	<i>Escherichia coli</i>	Geometric mean of indicator bacteria greater than criterion.	Y
IA 01-TRK-0110_0	Granger Creek	<i>Escherichia coli</i>	Geometric mean of indicator bacteria greater than criterion.	Y
IA 01-TRK-0120_0	Middle Fork Catfish Creek	<i>Escherichia coli</i>	Geometric mean of indicator bacteria greater than criterion.	Y
IA 01-TRK-0123_0	Middle Fork Catfish Creek	<i>Escherichia coli</i>	Geometric mean of indicator bacteria greater than criterion.	Y
IA 01-TRK-0125_0	North Fork Catfish Creek	<i>Escherichia coli</i>	Geometric mean of indicator bacteria greater than criterion.	Y
IA 01-TRK-0127_0	North Fork Catfish Creek	<i>Escherichia coli</i>	Geometric mean of indicator bacteria greater than criterion.	Y
IA 01-TRK-0130_0	South Fork Catfish Creek	<i>Escherichia coli</i>	Geometric mean of indicator bacteria greater than criterion.	Y
IA 01-TRK-0230_3	Little Turkey River	<i>Escherichia coli</i>	Geometric mean of indicator bacteria greater than criterion.	Y
IA 01-TRK-0230_4	Little Turkey River	<i>Escherichia coli</i>	Geometric mean of indicator bacteria greater than criterion.	Y
IA 01-TRK-0360_3	Roberts Creek	Cause unknown – biological integrity	Biological monitoring in 2008 and 2009 indicate the biological community is no longer impaired.	
IA 01-UIA-0010_1	Paint Creek	Cause unknown – biological integrity	Biological monitoring in 2007, 2010 and 2011 indicate the biological community is no longer impaired.	
IA 01-UIA-0110_3	Upper Iowa River	Cause unknown – biological integrity	Results of 2012 Iowa mussel survey indicate mussel community has recovered.	
IA 01-UIA-0120_1	Upper Iowa River	<i>Escherichia coli</i>	Geometric mean of indicator bacteria greater than criterion.	Y
IA 01-UIA-0210_0	Paint Creek (aka Pine Cr.)	<i>Escherichia coli</i>	Geometric mean of indicator bacteria greater than criterion.	Y

IA 01-UIA-0330_0	Twin Springs Creek	<i>Escherichia coli</i>	Geometric mean of indicator bacteria greater than criterion.	Y
IA 01-UIA-0340_0	Ten Mile Creek	<i>Escherichia coli</i>	Geometric mean of indicator bacteria greater than criterion.	Y
IA 01-VOL-00130-L_0	Frog Hollow (aka Volga Lake)	pH	Two consecutive listing cycles with pH levels within WQ criteria.	
IA 01-WPS-0010_5	Wapsipinicon River	Cause unknown – biological integrity	Results of 2012 Iowa mussel survey indicate mussel community has recovered.	
IA 01-WPS-0020_6	Wapsipinicon River	Cause unknown – biological integrity	Results of 2012 Iowa mussel survey indicate mussel community has recovered.	
IA 01-WPS-0030_1	Wapsipinicon River	Cause unknown – biological integrity	Results of biological monitoring in 2004 and 2010 indicate the fish and invertebrate communities are no longer impaired. Results of 2012 Iowa mussel survey indicate mussel community has recovered.	
IA 01-WPS-0132_0	East Branch Buffalo Creek	Organic enrichment/Low Dissolved Oxygen	Greater than 10% of samples less than criterion minimum.	Y
IA 01-WPS-0183_0	Unnamed Tributary to Crane Creek	Fish Kill(s)	Restitution sought and received for fish kill that occurred in 2009.	
IA 01-WPS-190_3	East Fork Wapsipinicon River	Fish Kill(s)	Pollutant cause indicated.	Y
IA 01-YEL-0020_2	Buck Creek	Fish Kill(s)	Restitution sought and received for fish kill that occurred in 2009.	
IA 01-YEL-0021_0	Buck Creek	Fish Kill(s)	Restitution sought and received for fish kill that occurred in 2009.	
IA 01-YEL-0070_0	Yellow River	<i>Escherichia coli</i>	A TMDL for bacterial impairment was approved by the EPA in 2013.	
IA 01-YEL-0080_2	Yellow River	<i>Escherichia coli</i>	A TMDL for bacterial impairment was approved by the EPA in 2013.	
IA 01-YEL-0080_3	Yellow River	<i>Escherichia coli</i>	A TMDL for bacterial impairment was approved by the EPA in 2013.	
IA 01-YEL-0090_0	Dousman Creek	<i>Escherichia coli</i>	A TMDL for bacterial impairment was approved by the EPA in 2013.	
IA 01-YEL-0100_0	Suttle Creek	<i>Escherichia coli</i>	A TMDL for bacterial impairment was approved by the EPA in 2013.	

IA 01-YEL-0110_0	Unnamed Creek (aka Bear Creek)	<i>Escherichia coli</i>	A TMDL for bacterial impairment was approved by the EPA in 2013.	
IA 01-YEL-0120_1	Hickory Creek	<i>Escherichia coli</i>	A TMDL for bacterial impairment was approved by the EPA in 2013.	
IA 01-YEL-0125_0	Williams Creek	<i>Escherichia coli</i>	A TMDL for bacterial impairment was approved by the EPA in 2013.	
IA 01-YEL-0130_0	Norfolk Creek	<i>Escherichia coli</i>	A TMDL for bacterial impairment was approved by the EPA in 2013.	
IA 01-YEL-0150_0	Unnamed Creek	<i>Escherichia coli</i>	A TMDL for bacterial impairment was approved by the EPA in 2013.	
IA 01-YEL-0155_0	Unnamed Creek (aka Hecker Creek)	Chloride	Greater than 10% of samples greater than criterion.	Y
IA 01-YEL-0155_0	Unnamed Creek (aka Hecker Creek)	<i>Escherichia coli</i>	A TMDL for bacterial impairment was approved by the EPA in 2013.	
IA 01-YEL-0160_0	North Fork Yellow River	<i>Escherichia coli</i>	A TMDL for bacterial impairment was approved by the EPA in 2013.	
<b>Iowa-Cedar River Basin</b>				
IA 02-CED-00210-L_0	Cedar Bend Lake	Fish advisories - PCBs	Monitoring in 2008 and 2010 show PCB levels below advisory threshold.	
IA 02-CED-0270_1	Lime Creek	Cause unknown – biological integrity	Results of 2007, 2009 and 2010 Iowa mussel surveys indicate mussel community has recovered.	
IA 02-CED-00310-L_0	Pleasant Creek Lake	<i>Escherichia coli</i>	Single sample maximum criterion exceeded.	Y
IA 02-CED-03833_0	Mosquito Creek	<i>Escherichia coli</i>	Geometric mean of indicator bacteria greater than criterion.	Y
IA 02-CED-03835_0	Minnehaha Creek	<i>Escherichia coli</i>	Geometric mean of indicator bacteria greater than criterion.	Y
IA 02-CED-03855_0	Holland Creek	<i>Escherichia coli</i>	Geometric mean of indicator bacteria greater than criterion.	Y
IA 02-CED-0393_0	Dry Run	<i>Escherichia coli</i>	Geometric mean of indicator bacteria greater than criterion.	Y

IA 02-CED-0394_0	Unnamed Tributary to Dry Run	<i>Escherichia coli</i>	Geometric mean of indicator bacteria greater than criterion.	Y
IA 02-CED-0505_1	Unnamed Creek (aka Drainage Ditch 3)	Fish Kill(s)	Results of a 2011 follow-up survey show that the fish community has recovered.	
IA 02-CED-0550_0	Otter Creek	Fish Kill(s)	Kill caused by animal waste.	Y
IA 02-ICD-0020_3	Flint Creek	Fish Kill(s)	Restitution sought and received for fish kill that occurred in 2009.	
IA 02-ICD-0021_0	Flint Creek	Fish Kill(s)	Restitution sought and received for fish kill that occurred in 2009.	
IA 02-ICM-0010_1	Mississippi River	<i>Escherichia coli</i>	Original listing based on Illinois data, new data now shows meeting Illinois WQS.	
IA 02-ICM-0010_2	Mississippi River	<i>Escherichia coli</i>	Original listing based on Illinois data, new data now shows meeting Illinois WQS.	
IA 02-ICM-0010_1	Iowa River	<i>Escherichia coli</i>	Geometric mean of indicator bacteria greater than criterion.	Y
IA 02-ICM-0010_2	Iowa River	<i>Escherichia coli</i>	Geometric mean of indicator bacteria greater than criterion.	Y
IA 02-IOW-0030_1	Iowa River	Cause unknown – biological integrity	Results of 2011 and 2012 Iowa mussel surveys indicate mussel community has recovered.	
IA 02-IOW-0070_5	Iowa River	Fish advisories - Mercury	Fish consumption advisory for mercury.	Y
IA 02-IOW-00870-L_0	Elm Lake	Algal growth/ Chlorophyll a	High levels of chlorophyll a exceed narrative translator.	Y
IA 02-IOW-00870-L_0	Elm Lake	Turbidity	High levels of suspended solids exceed narrative translator.	Y
IA 02-IOW-01150-L_0	Iowa Lake	pH	Two consecutive listing cycles with pH levels within WQ criteria.	

IA 02-IOW-01150-L_0	Iowa Lake	<i>Escherichia coli</i>	Single sample maximum criterion exceeded.	Y
IA 02-IOW-0152_0	Picayune Creek	Fish Kill(s)	Restitution sought and received for fish kill in 2009.	
IA 02-IOW-01525_0	Unnamed Tributary to Picayune Creek	Fish Kill(s)	Restitution sought and received for fish kill in 2009.	
IA 02-IOW-0156_0	Unnamed Tributary to Ralston Creek	Fish Kill(s)	Kill related to tile line discharge.	Y
IA 02-IOW-0162_0	Muddy Creek	<i>Escherichia coli</i>	Geometric mean of indicator bacteria greater than criterion.	Y
IA 02-IOW-0187_2	Walnut Creek	<i>Escherichia coli</i>	Geometric mean of indicator bacteria greater than criterion.	Y
IA 02-IOW-0188_0	Walnut Creek	<i>Escherichia coli</i>	Geometric mean of indicator bacteria greater than criterion.	Y
IA 02-IOW-0189_0	Unnamed Tributary to Walnut Creek	<i>Escherichia coli</i>	Geometric mean of indicator bacteria greater than criterion.	Y
IA 02-IOW-0191_0	Unnamed Tributary to Walnut Creek	<i>Escherichia coli</i>	Geometric mean of indicator bacteria greater than criterion.	Y
IA 02-IOW-02611_0	Unnamed Tributary to Drainage Ditch 55	Fish Kill(s)	Results of a 2011 follow-up survey show that the fish community has recovered.	
IA 02-IOW-0302_0	Unnamed Tributary to Tipton Creek	<i>Escherichia coli</i>	Geometric mean of indicator bacteria greater than criterion.	Y
IA 02-IOW-0380_1	East Branch Iowa River	<i>Escherichia coli</i>	Geometric mean of indicator bacteria greater than criterion.	Y
IA 02-IOW-0380_3	East Branch Iowa River	<i>Escherichia coli</i>	Geometric mean of indicator bacteria greater than criterion.	Y
IA 02-IOW-0390_0	Galls Creek	<i>Escherichia coli</i>	Geometric mean of indicator bacteria greater than criterion.	Y

IA 02-IOW-04045-L_0	West Twin Lake	Algal growth/ Chlorophyll a	Chlorophyll a TSI greater than 65.	Y
IA 02-IOW-04095-L_0	Crystal Lake	<i>Escherichia coli</i>	Two consecutive listing cycles with levels of indicator bacteria below WQ criteria.	
IA 02-SHL-0010_1	Shell Rock River	Fish advisories - Mercury	Fish consumption advisory for mercury.	Y
IA 02-SHL-0010_2	Shell Rock River	<i>Escherichia coli</i>	Geometric mean of indicator bacteria greater than criterion.	Y
IA 02-SHL-0010_2	Shell Rock River	Fish advisories - Mercury	Fish consumption advisory for mercury.	Y
IA 02-SHL-0010_3	Shell Rock River	Fish advisories - Mercury	Fish consumption advisory for mercury.	Y
IA 02-SHL-0020_2	Shell Rock River	Organic enrichment/Low Dissolved Oxygen	Greater than 10% of samples less than criterion minimum.	Y
IA 02-WFC-0110_0	Bailey Creek	Fish Kill(s)	Kill caused by pesticide spill.	Y
IA 02-WFC-0146_0	Unnamed Tributary to Unnamed Tributary to West Fork Cedar River	Fish Kill(s)	Kill suspected to be caused by pollutant.	Y
IA 02-WIN-0020_1	Winnebago River	Fish Kill(s)	Restitution sought and received for fish kill that occurred in 2009.	
<b>Skunk River Basin</b>				
IA 03-NSK-0039-0	Coal Creek	Fish Kill(s)	Results of a 2011 follow-up survey show that the fish community has recovered.	
IA 03-SKM-0010_1	Mississippi River	<i>Escherichia coli</i>	Original listing based on Illinois data, new data now shows meeting Illinois WQS.	
IA 03-SKM-0010_2	Mississippi River	<i>Escherichia coli</i>	Original listing based on Illinois data, new data now shows meeting Illinois WQS.	

IA 03-SKU-0010_1	Skunk River	<i>Escherichia coli</i>	Geometric mean of indicator bacteria greater than criterion.	Y
IA 03-SKU-00650-L_0	Geode Lake	<i>Escherichia coli</i>	A TMDL was approved by the EPA in 2009 to address this impairment.	
IA 03-SKU-00650-L_0	Geode Lake	pH	A TMDL was approved by the EPA in 2009 to address this impairment.	
IA 03-SKU-0080_3	Big Creek	Fish Kill(s)	Restitution sought and received for fish kill that occurred in 2008.	
IA 03-SKU-0081_0	South Big Creek	Fish Kill(s)	Restitution sought and received for fish kill that occurred in 2008.	
IA 03-SKU-00945-L_0	Walton Reservoir	Atrazine	Atrazine levels in monitoring from 2010-2012 below WQS.	
IA 03-SKU-0130_0	West Fork Crooked Creek	Fish Kill(s)	Results of a 2010 follow-up survey show that the fish community has recovered.	
IA 03-SKU-01450-L_0	Lake Darling	<i>Escherichia coli</i>	Beach monitoring shows WQS being met.	
IA 03-SKU-0174_0	Unnamed Tributary to Indian Creek	Fish Kill(s)	Restitution sought and received for fish kill in 2009.	
IA 03-SSK-00120-L_0	Lake Keomah	pH	A TMDL was approved by the EPA in 2011 to address this impairment.	
IA 03-SSK-00120-L_0	Lake Keomah	Algal growth/ Chlorophyll <i>a</i>	A TMDL was approved by the EPA in 2011 to address this impairment.	
IA 03-SSK-00120-L_0	Lake Keomah	Fish Advisory - Mercury	Fish consumption advisory for mercury has been issued.	Y
<b>Des Moines River Basin</b>				
IA 04-FOX-0010_2	Fox River	<i>Escherichia coli</i>	Geometric mean of indicator bacteria greater than criterion.	Y

IA 04-LDM-0010_3	Des Moines River	<i>Escherichia coli</i>	Geometric mean of indicator bacteria greater than criterion.	Y
IA 04-LDM-0010_4	Des Moines River	<i>Escherichia coli</i>	Geometric mean of indicator bacteria greater than criterion.	Y
IA 04-LDM-0030-L_0	Red Rock Reservoir	<i>Escherichia coli</i>	Beach monitoring shows WQS being met.	
IA 04-LDM-00160-L_0	Lacey Keosauqua Lake	<i>Escherichia coli</i>	Single sample maximum criterion exceeded.	Y
IA 04-LDM-00995-L_0	Lake Wapello	<i>Escherichia coli</i>	Single sample maximum criterion exceeded.	Y
IA 04-LDM-0200_0	White Breast Creek	Low Dissolved Oxygen	Monitoring data shows this water body is meeting WQS for dissolved oxygen.	
IA 04-LDM-00270-L_0	Lake Miami	Fish Advisory - Mercury	Fish consumption advisory for mercury has been issued.	Y
IA 04-LDM-02615-L_0	Lake Ahquabi	<i>Escherichia coli</i>	Single sample maximum criterion exceeded.	Y
IA 04-RAC-00475-L_0	Black Hawk Lake	Secchi Disk Transparency	A TMDL was approved by the EPA in 2012 to address this impairment.	
IA 04-RAC-00475-L_0	Black Hawk Lake	<i>Escherichia coli</i>	Monitoring data shows this water body is meeting WQS for indicator bacteria.	
IA 04-RAC-00475-L_0	Black Hawk Lake	Algal growth/ Chlorophyll <i>a</i>	A TMDL was approved by the EPA in 2012 to address this impairment.	
IA 04-RAC-01390-L_0	North Twin Lake	<i>Escherichia coli</i>	Single sample maximum criterion exceeded.	Y
IA 04-RAC-02220-L_0	Springbrook Lake	<i>Escherichia coli</i>	Geometric mean of indicator bacteria greater than criterion.	Y
IA 04-RAC-02401_0	Mosquito Creek	Fish Kill(s)	Results of a 2011 follow-up survey show that the fish community has recovered.	

IA 04-UDM-0090_1	Des Moines River	Fish Advisory - Mercury	Fish consumption advisory for mercury has been issued.	Y
IA 04-UDM-0140-L_0	Big Creek Lake	<i>Escherichia coli</i>	A TMDL was approved by the EPA in 2011 to address this impairment.	
IA 04-UDM-01650-L_0	Don Williams Lake	<i>Escherichia coli</i>	Monitoring data shows this water body is meeting WQS for indicator bacteria.	
IA 04-UDM-0180_1	Boone River	<i>Escherichia coli</i>	Monitoring data shows this water body is meeting WQS for indicator bacteria.	
IA 04-UDM-01880-L_0	Briggs Woods Lake	Algal growth/ Chlorophyll <i>a</i>	A TMDL was approved by the EPA in 2011 to address this impairment.	
IA 04-UDM-01880-L_0	Briggs Woods Lake	Fish Kill(s)	A TMDL was approved by the EPA in 2011 to address this impairment.	
IA 04-UDM-01880-L_0	Briggs Woods Lake	pH	More than 10% of samples greater than criterion.	Y
IA 04-UDM-0275-L_0	Brushy Creek Lake	<i>Escherichia coli</i>	Single sample maximum criterion exceeded.	Y
IA 04-UDM-0290_0	Soldier Creek	Fish Kill(s)	Kill suspected to be caused by pollutant.	Y
IA 04-UDM-03983-L_0	West Swan Lake	Algal growth/ Chlorophyll <i>a</i>	High levels of chlorophyll <i>a</i> contribute to excursion of narrative translator	Y
IA 04-UDM-03983-L_0	West Swan Lake	Turbidity	High levels of turbidity contribute to excursion of narrative translator	Y
IA 04-UDM-0510-L_0	Four mile Lake	Secchi Disk Transparency	Shallow Lake methodology shows this water body meeting WQS.	
<b>Southern Iowa River Basins</b>				
IA 05-CHA-0020-L_1	Rathbun Reservoir	Turbidity	Inorganic suspended solids concentrations exceed narrative translator.	Y
IA 05-CHA-00690-L_0	Bob White Lake	Turbidity	Secchi TSI=80, aesthetically objectionable conditions.	Y

IA 05-GRA-00810-L_0	Little River Watershed Lake	Algal growth/ Chlorophyll <i>a</i>	Monitoring data shows this water body is meeting WQS for algal growth/chlorophyll <i>a</i> .	
IA 05-GRA-01920-L_0	Loch Ayr	Atrazine	Atrazine levels in monitoring from 2010-2012 below WQS.	
IA 05-NOD-00820-L_0	Mormon Trail Lake	<i>Escherichia coli</i>	Monitoring data shows this water body is meeting WQS for indicator bacteria.	
IA 05-NOD-00820-L_0	Mormon Trail Lake	pH	Two consecutive listing cycles with pH levels within WQ criteria.	
IA 05-NOD-0115_0	Rose Creek	Fish Kill(s)	Restitution sought and received for fish kill in 2009.	
IA 05-NSH-0010_0	Nishnabotna River	<i>Escherichia coli</i>	Geometric mean of indicator bacteria greater than criterion.	Y
IA 05-NSH-00580-L_0	Lake Anita	Algal growth/ Chlorophyll <i>a</i>	Chlorophyll <i>a</i> TSI=67, aesthetically objectionable conditions.	Y
IA 05-NSH-0063_0	Davids Creek	Fish Kill(s)	Results of a 2011 follow-up survey show that the fish community has recovered.	
IA 05-NSH-01440-L_0	Prairie Rose Lake	<i>Escherichia coli</i>	Single sample maximum criterion exceeded.	Y
IA 05-PLA-00285-L_0	McKinley Lake	Fish Advisory - PCBs	Fish consumption advisory for PCBs has been issued.	Y
IA 05-PLA-00335-L_0	Lake of Three Fires	<i>Escherichia coli</i>	A TMDL was approved by the EPA in 2010 to address this impairment.	
<b>Western Iowa River Basins</b>				
IA 06-BOY-00405-L_0	Willow Lake	<i>Escherichia coli</i>	Monitoring data shows this water body is meeting WQS for indicator bacteria.	
IA 06-BOY-00510-L_0	Yellow Smoke Park Lake	Fish Advisory - Mercury	Fish consumption advisory for mercury has been issued.	Y
IA 06-BSR-00280-L_0	Lake Pahoja	<i>Escherichia coli</i>	Monitoring data shows this water body is meeting WQS for indicator bacteria.	
IA 06-BSR-00280-L_0	Lake Pahoja	pH	Greater than 10% of samples greater than criterion.	Y
IA 06-BSR-0081_0	Unnamed Tributary to Mud Creek	Fish Kill(s)	Restitution sought and received for fish kill in 2009.	

IA 06-LSR-0010_0	Little Sioux River	<i>Escherichia coli</i>	Geometric mean of indicator bacteria greater than criterion.	Y
IA 06-LSR-00790-L_0	Crawford Creek Impoundment	Algal growth/ Chlorophyll <i>a</i>	Monitoring data shows this water body is meeting WQS for algal growth/chlorophyll <i>a</i> .	
IA 06-LSR-0101_0	Odebolt Creek	Fish Kill(s)	Results of a 2011 follow-up survey show that the fish community has recovered.	
IA 06-LSR-0223_0	Willow Creek	<i>Escherichia coli</i>	Geometric mean of indicator bacteria greater than criterion.	Y
IA 06-LSR-0224_0	Willow Creek	<i>Escherichia coli</i>	Geometric mean of indicator bacteria greater than criterion.	Y
IA 06-LSR-02293-L_0	Bluewing Marsh	Algal growth/ Chlorophyll <i>a</i>	Chlorophyll <i>a</i> TSI greater than 65.	Y
IA 06-LSR-02890-L_0	Center Lake	pH	Two consecutive listing cycles with pH levels within WQ criteria.	
IA 06-WEM-00265-L_0	Carter Lake	Turbidity	High levels of non-algal turbidity exceed narrative criterion.	Y

**Table 2.** EPA-approved 2012 Iowa § 303(d) List

Count	New listing	ADB Code	Water body Name	Cause of 303(d) listing
1	N	IA 01-MAQ-0005-L_0	SHRICKERS SLOUGH	ALGAL GRWTH/CHLOROPHYLL A
2	N	IA 01-MAQ-0005-L_0	SHRICKERS SLOUGH	SECCHI DISK TRANSPARENCY
3	N	IA 01-MAQ-0030_1	ELK RIVER	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
4	Y	IA 01-MAQ-0050_2	MAQUOKETA RIVER	E. COLI
5	N	IA 01-MAQ-0060_1	MAQUOKETA RIVER	CAUSE UNKNOWN (BIOLOGICAL): MUSSELS
6	N	IA 01-MAQ-0060_2	MAQUOKETA RIVER	CAUSE UNKNOWN (BIOLOGICAL): MUSSELS
7	N	IA 01-MAQ-0060_2	MAQUOKETA RIVER	E. COLI
8	N	IA 01-MAQ-0060_3	MAQUOKETA RIVER (INCLUDING LAKE DELHI)	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
9	N	IA 01-MAQ-0060_3	MAQUOKETA RIVER (INCLUDING LAKE DELHI)	E. COLI
10	N	IA 01-MAQ-0080_0	MAQUOKETA RIVER	E. COLI
11	N	IA 01-MAQ-0090-L_0	BACKBONE LAKE	E. COLI
12	N	IA 01-MAQ-01580-L_0	CENTRAL PARK LAKE	ALGAL GRWTH/CHLOROPHYLL A
13	N	IA 01-MAQ-01580-L_0	CENTRAL PARK LAKE	E. COLI
14	N	IA 01-MAQ-01580-L_0	CENTRAL PARK LAKE	PH
15	N	IA 01-MAQ-0200_0	SILVER CREEK	CAUSE UNKNOWN (BIOLOGICAL): MUSSELS
16	N	IA 01-MAQ-0210_0	BUCK CREEK	CAUSE UNKNOWN (BIOLOGICAL): MUSSELS
17	N	IA 01-MAQ-0210_0	BUCK CREEK	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
18	N	IA 01-MAQ-0220_1	PLUM CREEK	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
19	N	IA 01-MAQ-0220_1	PLUM CREEK	CAUSE UNKNOWN (BIOLOGICAL): MUSSELS

Count	New listing	ADB Code	Water body Name	Cause of 303(d) listing
20	N	IA 01-MAQ-0240_0	COFFINS CREEK	E. COLI
21	N	IA 01-MAQ-0250_0	HONEY CREEK	E. COLI
22	N	IA 01-NEM-0010_2	MISSISSIPPI RIVER	ALUMINUM
23	N	IA 01-NEM-0010_2	MISSISSIPPI RIVER	ARSENIC
24	N	IA 01-NEM-0010_2	MISSISSIPPI RIVER	CADMIUM
25	N	IA 01-NEM-0010_4	MISSISSIPPI RIVER	ALUMINUM
26	Y	IA 01-NEM-0010_4	MISSISSIPPI RIVER	CADMIUM
27	N	IA 01-NEM-00160-L_0	LAKE OF THE HILLS	ALGAL GRWTH/CHLOROPHYLL A
28	Y	IA 01-NEM-0030_1	MISSISSIPPI RIVER	ALUMINUM
29	Y	IA 01-NEM-0030_1	MISSISSIPPI RIVER	CADMIUM
30	N	IA 01-NEM-0053_0	MAD CREEK	E. COLI
31	N	IA 01-NEM-0063_0	STAFFORD CREEK	E. COLI
32	N	IA 01-NEM-0066_0	CANDLELIGHT CREEK	E. COLI
33	N	IA 01-NEM-0067_0	ROBIN CREEK	E. COLI
34	N	IA 01-NMQ-0010_1	NORTH FORK MAQUOKETA RIVER	E. COLI
35	N	IA 01-NMQ-0020_1	NORTH FORK MAQUOKETA RIVER	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
36	N	IA 01-NMQ-0020_1	NORTH FORK MAQUOKETA RIVER	CAUSE UNKNOWN (BIOLOGICAL): MUSSELS
37	N	IA 01-NMQ-0040_0	FARMERS CREEK	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
38	N	IA 01-NMQ-0080_0	PRAIRIE CREEK	FISH KILL(S)
39	N	IA 01-NMQ-0083_0	UNNAMED TRIBUTARY TO PRAIRIE CREEK	FISH KILL(S)
40	N	IA 01-NMQ-0100_1	WHITEWATER CREEK	CAUSE UNKNOWN (BIOLOGICAL): MUSSELS

Count	New listing	ADB Code	Water body Name	Cause of 303(d) listing
41	N	IA 01-NMQ-0100_1	WHITEWATER CREEK	E. COLI
42	N	IA 01-NMQ-0100_2	WHITEWATER CREEK	FISH KILL(S)
43	N	IA 01-NMQ-0110_0	JOHNS CREEK	CAUSE UNKNOWN (BIOLOGICAL): MUSSELS
44	N	IA 01-NMQ-0111_0	JOHNS CREEK	FISH KILL(S)
45	N	IA 01-NMQ-0140_0	BEAR CREEK	FISH KILL(S)
46	N	IA 01-NMQ-0141_0	BEAR CREEK	FISH KILL(S)
47	N	IA 01-NMQ-0160_0	HICKORY CREEK	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
48	N	IA 01-TRK-0010_1	PLEASANT CREEK	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
49	N	IA 01-TRK-0090_1	TETES DES MORTS CREEK	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
50	Y	IA 01-TRK-0090_1	TETES DES MORTS CREEK	E. COLI
51	N	IA 01-TRK-0090_1	TETES DES MORTS CREEK	FISH KILL(S)
52	Y	IA 01-TRK-0090_2	TETES DES MORTS CREEK	E. COLI
53	Y	IA 01-TRK-0095_0	LUX CREEK	E. COLI
54	Y	IA 01-TRK-0100_1	CATFISH CREEK	E. COLI
55	Y	IA 01-TRK-0100_2	CATFISH CREEK	E. COLI
56	N	IA 01-TRK-01005_2	UNNAMED TRIBUTARY TO CATFISH CREEK	SANITARY WASTE
57	Y	IA 01-TRK-0110_0	GRANGER CREEK	E. COLI
58	Y	IA 01-TRK-0120_0	MIDDLE FORK CATFISH CREEK	E. COLI
59	Y	IA 01-TRK-0123_0	MIDDLE FORK CATFISH CREEK	E. COLI
60	Y	IA 01-TRK-0125_0	NORTH FORK CATFISH CREEK	E. COLI
61	Y	IA 01-TRK-0127_0	NORTH FORK CATFISH CREEK	E. COLI

Count	New listing	ADB Code	Water body Name	Cause of 303(d) listing
62	Y	IA 01-TRK-0130_0	SOUTH FORK CATFISH CREEK	E. COLI
63	N	IA 01-TRK-0180_2	MIDDLE FORK LITTLE MAQUOKETA RIVER (A.K.A. BANKSTON CR.)	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
64	N	IA 01-TRK-0200_0	TURKEY RIVER	E. COLI
65	N	IA 01-TRK-0230_3	LITTLE TURKEY RIVER	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
66	Y	IA 01-TRK-0230_3	LITTLE TURKEY RIVER	E. COLI
67	Y	IA 01-TRK-0230_4	LITTLE TURKEY RIVER	E. COLI
68	N	IA 01-TRK-0240_0	POINT HOLLOW CREEK (AKA WHITE PINE CR.)	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
69	N	IA 01-TRK-0260_0	PECKS CREEK	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
70	N	IA 01-TRK-0381_0	SILVER CREEK	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
71	N	IA 01-TRK-0381_0	SILVER CREEK	E. COLI
72	N	IA 01-TRK-03817_0	UNNAMED TRIBUTARY TO UT TO SILVER CREEK	AMMONIA
73	N	IA 01-TRK-03817_0	UNNAMED TRIBUTARY TO UT TO SILVER CREEK	E. COLI
74	N	IA 01-TRK-0382_0	SILVER CREEK	E. COLI
75	N	IA 01-TRK-0416_0	NUTTING CREEK	E. COLI
76	N	IA 01-TRK-0440_4	CRANE CREEK	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
77	N	IA 01-TRK-04515_0	UNNAMED TRIBUTARY TO BASS CREEK	FISH KILL(S)
78	N	IA 01-UIA-0090_0	UPPER IOWA RIVER	E. COLI
79	N	IA 01-UIA-0090_0	UPPER IOWA RIVER	FISH ADVISORIES-MERCURY
80	N	IA 01-UIA-0100_0	UPPER IOWA RIVER	E. COLI

Count	New listing	ADB Code	Water body Name	Cause of 303(d) listing
81	N	IA 01-UIA-0100_0	UPPER IOWA RIVER	FISH ADVISORIES-MERCURY
82	N	IA 01-UIA-0110_1	UPPER IOWA RIVER	FISH ADVISORIES-MERCURY
83	N	IA 01-UIA-0110_2	UPPER IOWA RIVER	CAUSE UNKNOWN (BIOLOGICAL): MUSSELS
84	N	IA 01-UIA-0110_2	UPPER IOWA RIVER	E. COLI
85	N	IA 01-UIA-0110_2	UPPER IOWA RIVER	FISH ADVISORIES-MERCURY
86	N	IA 01-UIA-0120_1	UPPER IOWA RIVER	CAUSE UNKNOWN (BIOLOGICAL): MUSSELS
87	Y	IA 01-UIA-0120_1	UPPER IOWA RIVER	E. COLI
88	N	IA 01-UIA-0130_0	IRISH HOLLOW CREEK	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
89	N	IA 01-UIA-0140_0	FRENCH CREEK	E. COLI
90	N	IA 01-UIA-0150_0	CLEAR CREEK	E. COLI
91	N	IA 01-UIA-0160_0	SILVER CREEK	E. COLI
92	N	IA 01-UIA-0170_1	BEAR CREEK	E. COLI
93	N	IA 01-UIA-0170_2	BEAR CREEK	FISH KILL(S)
94	N	IA 01-UIA-0180_0	WATERLOO CREEK	E. COLI
95	N	IA 01-UIA-0190_0	NORTH BEAR CREEK	E. COLI
96	Y	IA 01-UIA-0210_0	PAINT CREEK (AKA PINE CREEK)	E. COLI
97	N	IA 01-UIA-0230_0	PATTERSON CREEK	E. COLI
98	N	IA 01-UIA-0240_1	CANOE CREEK	E. COLI
99	N	IA 01-UIA-0270_0	COON CREEK	E. COLI
100	N	IA 01-UIA-0280_1	TROUT CREEK	E. COLI
101	N	IA 01-UIA-0300_1	TROUT CREEK (AKA TROUT RUN)	E. COLI

Count	New listing	ADB Code	Water body Name	Cause of 303(d) listing
102	N	IA 01-UIA-0320_0	DRY RUN	E. COLI
103	Y	IA 01-UIA-0330_0	TWIN SPRINGS CREEK	E. COLI
104	N	IA 01-UIA-0340_0	TEN MILE CREEK	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
105	Y	IA 01-UIA-0340_0	TEN MILE CREEK	E. COLI
106	N	IA 01-UIA-0350_0	UNNAMED CREEK (AKA CASEY SPRING CR.)	E. COLI
107	N	IA 01-UIA-0370_0	PINE CREEK	E. COLI
108	N	IA 01-UIA-0380_0	EAST PINE CREEK	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
109	N	IA 01-UIA-0390_0	UNNAMED CREEK (AKA COLD WATER CR.)	E. COLI
110	N	IA 01-UIA-0403_0	SILVER CREEK	E. COLI
111	N	IA 01-UIA-0410_0	NICHOLS CREEK (AKA BIGALK CR.)	E. COLI
112	N	IA 01-UIA-0420_1	BEAVER CREEK	E. COLI
113	N	IA 01-UIA-0430_0	STAFF CREEK	E. COLI
114	N	IA 01-VOL-0010_1	VOLGA RIVER	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
115	N	IA 01-VOL-0010_3	VOLGA RIVER	FISH ADVISORIES-MERCURY
116	N	IA 01-VOL-00130-L_0	FROG HOLLOW (AKA VOLGA LAKE)	ALGAL GRWTH/CHLOROPHYLL A
117	Y	IA 01-VOL-00130-L_0	FROG HOLLOW (AKA VOLGA LAKE)	TURBIDITY
118	N	IA 01-VOL-0020_1	VOLGA RIVER	FISH ADVISORIES-MERCURY
119	N	IA 01-VOL-0020_2	VOLGA RIVER	FISH ADVISORIES-MERCURY
120	N	IA 01-VOL-0120_2	BRUSH CREEK	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
121	N	IA 01-VOL-0150_1	LITTLE VOLGA RIVER	FISH ADVISORIES-MERCURY

Count	New listing	ADB Code	Water body Name	Cause of 303(d) listing
122	N	IA 01-WPS-0010_1	WAPSIPINICON RIVER	E. COLI
123	N	IA 01-WPS-0010_2	WAPSIPINICON RIVER	E. COLI
124	N	IA 01-WPS-0010_4	WAPSIPINICON RIVER	E. COLI
125	N	IA 01-WPS-0010_5	WAPSIPINICON RIVER	E. COLI
126	N	IA 01-WPS-0020_1	WAPSIPINICON RIVER	E. COLI
127	N	IA 01-WPS-0020_4	WAPSIPINICON RIVER	E. COLI
128	N	IA 01-WPS-0030_5	WAPSIPINICON RIVER	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
129	N	IA 01-WPS-0030_5	WAPSIPINICON RIVER	FISH KILL(S)
130	N	IA 01-WPS-00375-L_0	LAKE HENDRICKS	ALGAL GRWTH/CHLOROPHYLL A
131	N	IA 01-WPS-00375-L_0	LAKE HENDRICKS	PH
132	N	IA 01-WPS-0050_1	BROPHY CREEK	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
133	N	IA 01-WPS-0109_0	WALNUT CREEK	FISH KILL(S)
134	N	IA 01-WPS-0110_1	BUFFALO CREEK	CAUSE UNKNOWN (BIOLOGICAL): MUSSELS
135	N	IA 01-WPS-0110_2	BUFFALO CREEK	CAUSE UNKNOWN (BIOLOGICAL): MUSSELS
136	N	IA 01-WPS-0110_3	BUFFALO CREEK	CAUSE UNKNOWN (BIOLOGICAL): MUSSELS
137	N	IA 01-WPS-0130_1	BUFFALO CREEK	CAUSE UNKNOWN (BIOLOGICAL): MUSSELS
138	N	IA 01-WPS-0130_2	BUFFALO CREEK	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
139	Y	IA 01-WPS-0130_2	BUFFALO CREEK	CAUSE UNKNOWN (BIOLOGICAL): MUSSELS
140	Y	IA 01-WPS-0132_0	EAST BRANCH BUFFALO CREEK	ORGANIC ENRICHMENT/ LOW DO
141	N	IA 01-WPS-0153_0	UNNAMED CREEK (NEAR HAZLETON)	FISH KILL(S)
142	Y	IA 01-WPS-0190_3	EAST FORK WAPSIPINICON RIVER	FISH KILL(S)

Count	New listing	ADB Code	Water body Name	Cause of 303(d) listing
143	Y	IA 01-WPS-0237_0	UNNAMED TRIBUTARY TO LAKE HENDRICKS	E. COLI
144	N	IA 01-WPS-0270_0	UNNAMED TRIBUTARY TO BUFFALO CREEK	FISH KILL(S)
145	N	IA 01-YEL-0010_2	MINERS CREEK	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
146	N	IA 01-YEL-0060_0	BLOODY RUN	E. COLI
147	N	IA 01-YEL-0080_1	YELLOW RIVER	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
148	N	IA 01-YEL-0080_2	YELLOW RIVER	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
149	N	IA 01-YEL-0080_2	YELLOW RIVER	LOW DISSOLVED OXYGEN
150	N	IA 01-YEL-0080_3	YELLOW RIVER	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
151	N	IA 01-YEL-0090_0	DOUSMAN CREEK	LOW DISSOLVED OXYGEN
152	N	IA 01-YEL-0100_0	SUTTLE CREEK	LOW DISSOLVED OXYGEN
153	N	IA 01-YEL-0110_0	UNNAMED CREEK (AKA BEAR CR.)	LOW DISSOLVED OXYGEN
154	N	IA 01-YEL-0120_1	HICKORY CREEK	LOW DISSOLVED OXYGEN
155	N	IA 01-YEL-0130_0	NORFOLK CREEK	LOW DISSOLVED OXYGEN
156	N	IA 01-YEL-0150_0	UNNAMED CREEK	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
157	N	IA 01-YEL-0155_0	UNNAMED CREEK (AKA HECKER CR.)	FISH KILL(S)
158	Y	IA 01-YEL-0155_0	UNNAMED CREEK (AKA HECKER CR.)	CHLORIDE
159	N	IA 01-YEL-0160_0	NORTH FORK YELLOW RIVER	LOW DISSOLVED OXYGEN
<b>Iowa-Cedar River Basin</b>				
160	N	IA 02-CED-0010_0	CEDAR RIVER	E. COLI
161	N	IA 02-CED-0020_2	CEDAR RIVER	CAUSE UNKNOWN (BIOLOGICAL): MUSSELS

Count	New listing	ADB Code	Water body Name	Cause of 303(d) listing
162	N	IA 02-CED-0030_3	CEDAR RIVER	E. COLI
163	Y	IA 02-CED-00310-L_0	PLEASANT CREEK LAKE	E. COLI
164	N	IA 02-CED-0040_2	CEDAR RIVER	E. COLI
165	N	IA 02-CED-00460-L_0	MEYERS LAKE	ALGAL GRWTH/CHLOROPHYLL A
166	N	IA 02-CED-0060_1	CEDAR RIVER	E. COLI
167	N	IA 02-CED-0060_2	CEDAR RIVER	E. COLI
168	N	IA 02-CED-0070_0	CEDAR RIVER	E. COLI
169	N	IA 02-CED-0110_1	CEDAR RIVER	E. COLI
170	N	IA 02-CED-0110_2	CEDAR RIVER	FISH ADVISORIES-MERCURY
171	N	IA 02-CED-0110_3	CEDAR RIVER	CAUSE UNKNOWN (BIOLOGICAL): MUSSELS
172	N	IA 02-CED-0110_3	CEDAR RIVER	FISH ADVISORIES-MERCURY
173	N	IA 02-CED-01545_0	UNNAMED TRIBUTARY TO WEST BRANCH WAPSINONOC CREEK (AKA HOOVER CREEK)	E. COLI
174	N	IA 02-CED-0157_1	PIKE RUN	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
175	N	IA 02-CED-0157_2	PIKE RUN	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
176	N	IA 02-CED-0163_0	UNNAMED TRIBUTARY TO MUD CREEK	FISH KILL(S)
177	N	IA 02-CED-0170_1	SUGAR CREEK	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
178	N	IA 02-CED-0210_1	INDIAN CREEK	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
179	N	IA 02-CED-0210_1	INDIAN CREEK	E. COLI
180	N	IA 02-CED-0210_2	INDIAN CREEK	E. COLI
181	N	IA 02-CED-0217_0	DRY CREEK	E. COLI

Count	New listing	ADB Code	Water body Name	Cause of 303(d) listing
182	N	IA 02-CED-0218_0	MCLOUD RUN	FISH KILL(S)
183	N	IA 02-CED-02250-L_0	CEDAR LAKE	FISH ADVISORIES (PCB)
184	N	IA 02-CED-0234_0	EAST BRANCH BLUE CREEK	FISH KILL(S)
185	N	IA 02-CED-0270_1	LIME CREEK	E. COLI
186	N	IA 02-CED-0300_0	WOLF CREEK	E. COLI
187	N	IA 02-CED-03060-L_0	CASEY LAKE (AKA HICKORY HILLS LAKE)	ALGAL GRWTH/CHLOROPHYLL A
188	N	IA 02-CED-03060-L_0	CASEY LAKE (AKA HICKORY HILLS LAKE)	PH
189	N	IA 02-CED-0370_2	BLACK HAWK CREEK	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
190	N	IA 02-CED-0370_2	BLACK HAWK CREEK	E. COLI
191	N	IA 02-CED-0380_0	BLACK HAWK CREEK	E. COLI
192	N	IA 02-CED-0383_0	NORTH BLACK HAWK CREEK	E. COLI
193	Y	IA 02-CED-03833_0	MOSQUITO CREEK	E. COLI
194	Y	IA 02-CED-03835_0	MINNEHAHA CREEK	E. COLI
195	N	IA 02-CED-0385_0	HOLLAND CREEK	E. COLI
196	Y	IA 02-CED-03855_0	HOLLAND CREEK	E. COLI
197	N	IA 02-CED-0390_0	DRY RUN	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
198	N	IA 02-CED-0390_0	DRY RUN	E. COLI
199	N	IA 02-CED-03905-L_0	SOUTH PRAIRIE LAKE	PH
200	N	IA 02-CED-0391_0	DRY RUN (SOUTH BRANCH)	E. COLI
201	N	IA 02-CED-0392_0	DRY RUN (NORTH BRANCH)	E. COLI

Count	New listing	ADB Code	Water body Name	Cause of 303(d) listing
202	Y	IA 02-CED-0393_0	DRY RUN	E. COLI
203	Y	IA 02-CED-0394_0	UNNAMED TRIBUTARY TO DRY RUN	E. COLI
204	N	IA 02-CED-0400_0	BEAVER CREEK	E. COLI
205	N	IA 02-CED-0410_2	BEAVER CREEK	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
206	N	IA 02-CED-0470_1	LITTLE CEDAR RIVER	E. COLI
207	N	IA 02-CED-0490_1	BURR OAK CREEK	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
208	N	IA 02-CED-0510_1	ROCK CREEK	E. COLI
209	N	IA 02-CED-0520_0	SPRING CREEK	E. COLI
210	N	IA 02-CED-0520_0	SPRING CREEK	LOW DISSOLVED OXYGEN
211	N	IA 02-CED-0530_0	TURTLE CREEK	E. COLI
212	N	IA 02-CED-0540_1	DEER CREEK	E. COLI
213	N	IA 02-CED-0550_0	OTTER CREEK	E. COLI
214	Y	IA 02-CED-0550_0	OTTER CREEK	FISH KILL(S)
215	N	IA 02-ICD-0031_1	COTTONWOOD DRAIN	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
216	N	IA 02-ICM-0010_2	MISSISSIPPI RIVER	ALUMINUM
217	N	IA 02-ICM-0010_2	MISSISSIPPI RIVER	ARSENIC
218	N	IA 02-ICM-0010_2	MISSISSIPPI RIVER	CADMIUM
219	Y	IA 02-IOW-0010_1	IOWA RIVER	E. COLI
220	Y	IA 02-IOW-0010_2	IOWA RIVER	E. COLI
221	N	IA 02-IOW-0010_3	IOWA RIVER	E. COLI
222	N	IA 02-IOW-0020_1	IOWA RIVER	CAUSE UNKNOWN (BIOLOGICAL): MUSSELS

Count	New listing	ADB Code	Water body Name	Cause of 303(d) listing
223	N	IA 02-IOW-0020_1	IOWA RIVER	E. COLI
224	N	IA 02-IOW-0030_1	IOWA RIVER	E. COLI
225	N	IA 02-IOW-00390-L_0	LAKE MACBRIDE	ALGAL GRWTH/CHLOROPHYLL A
226	N	IA 02-IOW-00390-L_0	LAKE MACBRIDE	E. COLI
227	N	IA 02-IOW-00390-L_0	LAKE MACBRIDE	PH
228	N	IA 02-IOW-0040-L_0	CORALVILLE RESERVOIR	TURBIDITY
229	N	IA 02-IOW-0050_1	IOWA RIVER	E. COLI
230	N	IA 02-IOW-0060_4	IOWA RIVER	E. COLI
231	N	IA 02-IOW-0060_5	IOWA RIVER	E. COLI
232	N	IA 02-IOW-00660-L_0	GREEN CASTLE LAKE	PH
233	N	IA 02-IOW-0070_3	IOWA RIVER	E. COLI
234	Y	IA 02-IOW-0070_5	IOWA RIVER	FISH ADVISORIES-MERCURY
235	N	IA 02-IOW-0080_2	IOWA RIVER	E. COLI
236	N	IA 02-IOW-00865_2	ROFF CREEK	SANITARY WASTE
237	Y	IA 02-IOW-00870-L_0	ELM LAKE	ALGAE
238	Y	IA 02-IOW-00870-L_0	ELM LAKE	TURBIDITY
239	N	IA 02-IOW-0093_0	HONEY CREEK	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
240	N	IA 02-IOW-0098_0	PRAIRIE CREEK	SANITARY WASTE
241	N	IA 02-IOW-0100_1	ENGLISH RIVER	E. COLI
242	N	IA 02-IOW-01150-L_0	IOWA LAKE	ALGAL GRWTH/CHLOROPHYLL A
243	Y	IA 02-IOW-01150-L_0	IOWA LAKE	E. COLI

Count	New listing	ADB Code	Water body Name	Cause of 303(d) listing
244	N	IA 02-IOW-01485_0	UNNAMED TRIBUTARY TO SNYDER CREEK	SANITARY WASTE
245	N	IA 02-IOW-0150_1	OLD MANS CREEK	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
246	N	IA 02-IOW-0150_2	OLD MANS CREEK	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
247	N	IA 02-IOW-0150_2	OLD MANS CREEK	E. COLI
248	N	IA 02-IOW-0155_1	RALSTON CREEK	PRIORITY ORGANICS
249	Y	IA 02-IOW-0156_0	UNNAMED TRIBUTARY TO RALSTON CREEK	FISH KILL(S)
250	Y	IA 02-IOW-0162_0	MUDDY CREEK	E. COLI
251	N	IA 02-IOW-0162_0	MUDDY CREEK	SANITARY WASTE
252	N	IA 02-IOW-01630-L_0	KENT PARK LAKE	ALGAL GRWTH/CHLOROPHYLL A
253	N	IA 02-IOW-01630-L_0	KENT PARK LAKE	PH
254	N	IA 02-IOW-0175_2	PRICE CREEK	E. COLI
255	N	IA 02-IOW-0176_0	PRICE CREEK	E. COLI
256	N	IA 02-IOW-0180_2	BEAR CREEK	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
257	N	IA 02-IOW-01810-L_0	HANNEN LAKE	ALGAL GRWTH/CHLOROPHYLL A
258	N	IA 02-IOW-01810-L_0	HANNEN LAKE	PH
259	N	IA 02-IOW-0185_1	LITTLE BEAR CREEK	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
260	N	IA 02-IOW-0187_1	WALNUT CREEK	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
261	N	IA 02-IOW-0187_2	WALNUT CREEK	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
262	Y	IA 02-IOW-0187_2	WALNUT CREEK	E. COLI
263	Y	IA 02-IOW-0188_0	WALNUT CREEK	E. COLI

Count	New listing	ADB Code	Water body Name	Cause of 303(d) listing
264	Y	IA 02-IOW-0189_0	UNNAMED TRIBUTARY TO WALNUT CREEK	E. COLI
265	Y	IA 02-IOW-0191_0	UNNAMED TRIBUTARY TO WALNUT CREEK	E. COLI
266	N	IA 02-IOW-02095-L_0	OTTER CREEK LAKE	ALGAL GRWTH/CHLOROPHYLL A
267	N	IA 02-IOW-0213_0	BENNETT CREEK	E. COLI
268	N	IA 02-IOW-0215_0	RAVEN CREEK	E. COLI
269	N	IA 02-IOW-0270_0	SOUTH FORK IOWA RIVER	E. COLI
270	N	IA 02-IOW-0280_3	SOUTH FORK IOWA RIVER	E. COLI
271	N	IA 02-IOW-0280_4	SOUTH FORK IOWA RIVER	E. COLI
272	N	IA 02-IOW-0280_5	SOUTH FORK IOWA RIVER	E. COLI
273	N	IA 02-IOW-0282_0	SOUTH FORK IOWA RIVER	E. COLI
274	N	IA 02-IOW-0290_0	BEAVER CREEK	E. COLI
275	N	IA 02-IOW-0295_0	BEAVER CREEK	E. COLI
276	N	IA 02-IOW-0297_0	SOUTH BEAVER CREEK	E. COLI
277	N	IA 02-IOW-0300_1	TIPTON CREEK	E. COLI
278	N	IA 02-IOW-0300_2	TIPTON CREEK	E. COLI
279	Y	IA 02-IOW-0302_0	UNNAMED TRIBUTARY TO TIPTON CREEK	E. COLI
280	N	IA 02-IOW-0330-L_0	LOWER PINE LAKE	E. COLI
281	N	IA 02-IOW-0335-L_0	UPPER PINE LAKE	ALGAL GRWTH/CHLOROPHYLL A
282	N	IA 02-IOW-0380_1	EAST BRANCH IOWA RIVER	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
283	Y	IA 02-IOW-0380_1	EAST BRANCH IOWA RIVER	E. COLI

Count	New listing	ADB Code	Water body Name	Cause of 303(d) listing
284	Y	IA 02-IOW-0380_3	EAST BRANCH IOWA RIVER	E. COLI
285	N	IA 02-IOW-03830-L_0	ELDRED SHERWOOD LAKE	ALGAL GRWTH/CHLOROPHYLL A
286	N	IA 02-IOW-03830-L_0	ELDRED SHERWOOD LAKE	E. COLI
287	Y	IA 02-IOW-0390_0	GALLS CREEK	E. COLI
288	Y	IA 02-IOW-04045-L_0	WEST TWIN LAKE	ALGAL GRWTH/CHLOROPHYLL A
289	Y	IA 02-SHL-0010_1	SHELL ROCK RIVER	FISH ADVISORIES-MERCURY
290	Y	IA 02-SHL-0010_2	SHELL ROCK RIVER	E. COLI
291	Y	IA 02-SHL-0010_2	SHELL ROCK RIVER	FISH ADVISORIES-MERCURY
292	Y	IA 02-SHL-0010_3	SHELL ROCK RIVER	FISH ADVISORIES-MERCURY
293	N	IA 02-SHL-00105-L_0	AVENUE OF THE SAINTS LAKE	ALGAE
294	N	IA 02-SHL-00105-L_0	AVENUE OF THE SAINTS LAKE	PH
295	N	IA 02-SHL-00105-L_0	AVENUE OF THE SAINTS LAKE	TURBIDITY
296	N	IA 02-SHL-0020_2	SHELL ROCK RIVER	E. COLI
297	Y	IA 02-SHL-0020_2	SHELL ROCK RIVER	ORGANIC ENRICHMENT/ LOW DO
298	N	IA 02-SHL-0021_0	FLOOD CREEK	E. COLI
299	N	IA 02-SHL-00235_0	PALMER CREEK	FISH KILL(S)
300	N	IA 02-WFC-0020_1	WEST FORK CEDAR RIVER	E. COLI
301	N	IA 02-WFC-0090-L_0	BEEDS LAKE	ALGAL GRWTH/CHLOROPHYLL A
302	N	IA 02-WFC-0110_0	BAILEY CREEK	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
303	Y	IA 02-WFC-0110_0	BAILEY CREEK	FISH KILL CAUSED BY PESTICIDES

Count	New listing	ADB Code	Water body Name	Cause of 303(d) listing
304	Y	IA 02-WFC-0146_0	UNNAMED TRIBUTARY TO UNNAMED TRIBUTARY OF WEST FORK CEDAR RIVER	FISH KILL DUE TO UNKNOWN TOXICITY
305	N	IA 02-WIN-0010_1	WINNEBAGO RIVER	E. COLI
306	N	IA 02-WIN-0010_2	WINNEBAGO RIVER	E. COLI
307	N	IA 02-WIN-0020_2	WINNEBAGO RIVER	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
308	N	IA 02-WIN-00450-L_0	CLEAR LAKE	E. COLI
309	N	IA 02-WIN-0050_0	CALMUS CREEK	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
310	N	IA 02-WIN-0081_0	BEAVER CREEK	LOW DISSOLVED OXYGEN
<b>Skunk River Basin</b>				
311	N	IA 03-NSK-0010_1	NORTH SKUNK RIVER	E. COLI
312	N	IA 03-NSK-0010_1	NORTH SKUNK RIVER	CHROMIUM
313	N	IA 03-NSK-0010_2	NORTH SKUNK RIVER	E. COLI
314	N	IA 03-NSK-0010_2	NORTH SKUNK RIVER	CHROMIUM
315	N	IA 03-NSK-0020_2	NORTH SKUNK RIVER	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
316	N	IA 03-NSK-00250-L_0	HAWTHORN LAKE	ALGAL GRWTH/CHLOROPHYLL A
317	N	IA 03-NSK-00250-L_0	HAWTHORN LAKE	TURBIDITY
318	N	IA 03-NSK-00340-L_0	ROCK CREEK LAKE	E. COLI
319	N	IA 03-SKM-0010_1	MISSISSIPPI RIVER	ALUMINUM
320	N	IA 03-SKM-0010_1	MISSISSIPPI RIVER	ARSENIC
321	N	IA 03-SKM-0010_1	MISSISSIPPI RIVER	CADMIUM
322	Y	IA 03-SKU-0010_1	SKUNK RIVER	E. COLI

Count	New listing	ADB Code	Water body Name	Cause of 303(d) listing
323	N	IA 03-SKU-00650-L_0	GEODE LAKE	FISH ADVISORIES-MERCURY
324	N	IA 03-SKU-00835_1	UNNAMED TRIBUTARY TO BRUSH CREEK	SANITARY WASTE
325	N	IA 03-SKU-0085_0	SAUNDERS BRANCH	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
326	N	IA 03-SKU-0090_1	CEDAR CREEK	E. COLI
327	N	IA 03-SKU-0126_0	EAST FORK CROOKED CREEK	FISH KILL(S)
328	N	IA 03-SSK-0010_2	SOUTH SKUNK RIVER	E. COLI
329	N	IA 03-SSK-0010_3	SOUTH SKUNK RIVER	E. COLI
330	N	IA 03-SSK-0010_3	SOUTH SKUNK RIVER	NITRATE
331	N	IA 03-SSK-00118-L_0	WHITE OAK CONSERVATION AREA LAKE	ALGAE
332	N	IA 03-SSK-00118-L_0	WHITE OAK CONSERVATION AREA LAKE	PH
333	N	IA 03-SSK-00120-L_0	LAKE KEOMAH	E. COLI
334	Y	IA 03-SSK-00120-L_0	LAKE KEOMAH	FISH ADVISORIES-MERCURY
335	N	IA 03-SSK-0020_1	SOUTH SKUNK RIVER	E. COLI
336	N	IA 03-SSK-0030_2	SOUTH SKUNK RIVER	E. COLI
337	N	IA 03-SSK-0030_3	SOUTH SKUNK RIVER	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
338	N	IA 03-SSK-0040_0	INDIAN CREEK	E. COLI
339	N	IA 03-SSK-00530-L_0	HICKORY GROVE LAKE	E. COLI
340	N	IA 03-SSK-0056-L_0	LAKE PATOKA	FISH KILL(S)
341	N	IA 03-SSK-0057_0	BALLARD CREEK	FISH KILL(S)
342	N	IA 03-SSK-0058_0	WALNUT CREEK	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY

Count	New listing	ADB Code	Water body Name	Cause of 303(d) listing
343	N	IA 03-SSK-0090_0	LONG DICK CREEK	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
344	N	IA 03-SSK-0091_0	LONG DICK CREEK	FISH KILL(S)
345	N	IA 03-SSK-0091_0	LONG DICK CREEK	E. COLI
<b>Des Moines-Raccoon River Basin</b>				
346	N	IA 04-EDM-0041_0	LOTTS CREEK	FISH KILL(S)
347	N	IA 04-EDM-0090_2	BUFFALO CREEK	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
348	N	IA 04-EDM-0090_3	BUFFALO CREEK	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
349	N	IA 04-FAB-0010_0	NORTH FABIVUS RIVER	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
350	N	IA 04-FOX-0010_1	FOX RIVER	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
351	N	IA 04-FOX-0010_2	FOX RIVER	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
352	Y	IA 04-FOX-0010_2	FOX RIVER	E. COLI
353	N	IA 04-LDM-0010_1	DES MOINES RIVER	E. COLI
354	N	IA 04-LDM-0010_2	DES MOINES RIVER	E. COLI
355	Y	IA 04-LDM-0010_3	DES MOINES RIVER	E. COLI
356	N	IA 04-LDM-0010_3	DES MOINES RIVER	FISH KILL(S)
357	Y	IA 04-LDM-0010_4	DES MOINES RIVER	E. COLI
358	N	IA 04-LDM-0010_4	DES MOINES RIVER	FISH KILL(S)
359	Y	IA 04-LDM-00160-L_0	LACEY KEOSAUQUA LAKE	E. COLI
360	N	IA 04-LDM-0020_1	DES MOINES RIVER	E. COLI
361	N	IA 04-LDM-0020_1	DES MOINES RIVER	FISH KILL(S)
362	N	IA 04-LDM-0020_2	DES MOINES RIVER	E. COLI

Count	New listing	ADB Code	Water body Name	Cause of 303(d) listing
363	N	IA 04-LDM-00215-L_0	OTTUMWA LAGOON	FISH KILL(S)
364	Y	IA 04-LDM-00270-L_0	LAKE MIAMI	FISH ADVISORIES-MERCURY
365	N	IA 04-LDM-0030-L_0	RED ROCK RESERVOIR	SECCHI DISK TRANSPARENCY
366	N	IA 04-LDM-00380-L_0	ROBERTS CREEK LAKE	ALGAL GRWTH/CHLOROPHYLL A
367	N	IA 04-LDM-00380-L_0	ROBERTS CREEK LAKE	TURBIDITY
368	N	IA 04-LDM-00490-L_0	EASTER LAKE	E. COLI
369	N	IA 04-LDM-0090_2	SOAP CREEK	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
370	Y	IA 04-LDM-00995-L_0	LAKE WAPELLO	E. COLI
371	N	IA 04-LDM-0130_0	MILLER CREEK	FISH KILL(S)
372	N	IA 04-LDM-0140_1	MUCHAKINOCK CREEK	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
373	N	IA 04-LDM-0140_2	MUCHAKINOCK CREEK	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
374	N	IA 04-LDM-0160_0	CEDAR CREEK	E. COLI
375	N	IA 04-LDM-0170_0	CEDAR CREEK	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
376	N	IA 04-LDM-0200_0	WHITE BREAST CREEK	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
377	N	IA 04-LDM-0200_0	WHITE BREAST CREEK	E. COLI
378	N	IA 04-LDM-0210_2	WHITE BREAST CREEK	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
379	N	IA 04-LDM-02296-L_0	RED HAW LAKE	E. COLI
380	N	IA 04-LDM-02296-L_0	RED HAW LAKE	FISH ADVISORIES-MERCURY
381	N	IA 04-LDM-0230_0	SOUTH RIVER	E. COLI
382	N	IA 04-LDM-02615-L_0	LAKE AHQUABI	ALGAL GRWTH/CHLOROPHYLL A
383	Y	IA 04-LDM-02615-L_0	LAKE AHQUABI	E. COLI

Count	New listing	ADB Code	Water body Name	Cause of 303(d) listing
384	N	IA 04-LDM-02690-L_0	WEST LAKE (OSCEOLA)	LOW DISSOLVED OXYGEN
385	N	IA 04-LDM-0270_0	MIDDLE RIVER	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
386	N	IA 04-LDM-0270_0	MIDDLE RIVER	E. COLI
387	N	IA 04-LDM-02700-L_0	GRADE LAKE	FISH ADVISORIES-MERCURY
388	N	IA 04-LDM-02725-L_0	SOUTH BANNER LAKE	FISH ADVISORIES-MERCURY
389	N	IA 04-LDM-02726-L_0	NORTH BANNER LAKE	FISH ADVISORIES-MERCURY
390	N	IA 04-LDM-02870-L_0	MEADOW LAKE	ALGAE
391	N	IA 04-LDM-0300_2	NORTH RIVER	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
392	N	IA 04-LDM-0300_2	NORTH RIVER	E. COLI
393	N	IA 04-LDM-0350_0	BEAR CREEK	LOW DISSOLVED OXYGEN
394	N	IA 04-RAC-0050_2	NORTH RACCOON RIVER	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
395	N	IA 04-RAC-00530-L_0	STORM LAKE	E. COLI
396	N	IA 04-RAC-0123_0	MARROWBONE CREEK	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
397	N	IA 04-RAC-0123_0	MARROWBONE CREEK	LOW DISSOLVED OXYGEN
398	N	IA 04-RAC-0127_0	ELK RUN	FISH KILL(S)
399	Y	IA 04-RAC-01390-L_0	NORTH TWIN LAKE	E. COLI
400	N	IA 04-RAC-01395-L_0	SOUTH TWIN LAKE	ALGAL GRWTH/CHLOROPHYLL A
401	N	IA 04-RAC-01395-L_0	SOUTH TWIN LAKE	SECCHI DISK TRANSPARENCY
402	N	IA 04-RAC-01690-L_0	PICKEREL LAKE	ALGAL GRWTH/CHLOROPHYLL A
403	N	IA 04-RAC-01690-L_0	PICKEREL LAKE	SECCHI DISK TRANSPARENCY
404	N	IA 04-RAC-01695_0	POOR FARM CREEK	FISH KILL(S)

Count	New listing	ADB Code	Water body Name	Cause of 303(d) listing
405	N	IA 04-RAC-0170_0	SOUTH RACCOON RIVER	E. COLI
406	N	IA 04-RAC-01750-L_0	BEAVER LAKE	ALGAL GRWTH/CHLOROPHYLL A
407	N	IA 04-RAC-01750-L_0	BEAVER LAKE	PH
408	Y	IA 04-RAC-02220-L_0	SPRINGBROOK LAKE	E. COLI
409	N	IA 04-RAC-0251_0	BRUSHY CREEK	FISH KILL(S)
410	N	IA 04-RAC-0253_0	BRUSHY CREEK	FISH KILL(S)
411	N	IA 04-UDM-0020-L_0	SAYLORVILLE RESERVOIR	E. COLI
412	N	IA 04-UDM-0030_1	DES MOINES RIVER	E. COLI
413	N	IA 04-UDM-0030_2	DES MOINES RIVER	E. COLI
414	N	IA 04-UDM-0040_1	DES MOINES RIVER	E. COLI
415	N	IA 04-UDM-0040_2	DES MOINES RIVER	E. COLI
416	N	IA 04-UDM-0060_0	DES MOINES RIVER	E. COLI
417	N	IA 04-UDM-0070_0	DES MOINES RIVER	E. COLI
418	Y	IA 04-UDM-0090_1	DES MOINES RIVER	FISH ADVISORIES-MERCURY
419	N	IA 04-UDM-0110_1	BEAVER CREEK	E. COLI
420	N	IA 04-UDM-0170_0	SKILLET CREEK	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
421	Y	IA 04-UDM-01880-L_0	BRIGGS WOODS LAKE	PH
422	N	IA 04-UDM-0215_0	LYONS CREEK	E. COLI
423	N	IA 04-UDM-0215_0	LYONS CREEK	FISH KILL(S)
424	N	IA 04-UDM-0247_0	BUTTERMILK CREEK	E. COLI
425	N	IA 04-UDM-0253_1	WEST OTTER CREEK	FISH KILL(S)

Count	New listing	ADB Code	Water body Name	Cause of 303(d) listing
426	N	IA 04-UDM-0266_0	EAST BRANCH BOONE RIVER	FISH KILL(S)
427	Y	IA 04-UDM-0275-L_0	BRUSHY CREEK LAKE	E. COLI
428	Y	IA 04-UDM-0290_0	SOLDIER CREEK	FISH KILL(S)
429	N	IA 04-UDM-0300_1	LIZARD CREEK	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
430	N	IA 04-UDM-0300_1	LIZARD CREEK	E. COLI
431	N	IA 04-UDM-03110-L_0	LIZARD LAKE	ALGAL GRWTH/CHLOROPHYLL A
432	N	IA 04-UDM-03110-L_0	LIZARD LAKE	SECCHI DISK TRANSPARENCY
433	Y	IA 04-UDM-03983-L_0	WEST SWAN LAKE	ALGAL GRWTH/CHLOROPHYLL A
434	Y	IA 04-UDM-03983-L_0	WEST SWAN LAKE	TURBIDITY
435	N	IA 04-UDM-0510-L_0	FOURMILE LAKE	ALGAL GRWTH/CHLOROPHYLL A
<b>Southern Iowa River Basin</b>				
436	N	IA 05-CHA-0010_2	CHARITON RIVER	E. COLI
437	Y	IA 05-CHA-0020-L_1	RATHBUN RESERVOIR	TURBIDITY
438	N	IA 05-CHA-0020-L_2	RATHBUN RESERVOIR	ALGAL GRWTH/CHLOROPHYLL A
439	N	IA 05-CHA-0020-L_2	RATHBUN RESERVOIR	SECCHI DISK TRANSPARENCY
440	N	IA 05-CHA-0020-L_3	RATHBUN RESERVOIR	ALGAL GRWTH/CHLOROPHYLL A
441	N	IA 05-CHA-0020-L_3	RATHBUN RESERVOIR	SECCHI DISK TRANSPARENCY
442	N	IA 05-CHA-0020-L_4	RATHBUN RESERVOIR	SECCHI DISK TRANSPARENCY
443	N	IA 05-CHA-0030_1	CHARITON RIVER	E. COLI
444	N	IA 05-CHA-0030_1	CHARITON RIVER	LOW DISSOLVED OXYGEN
445	N	IA 05-CHA-0030_2	CHARITON RIVER	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY

Count	New listing	ADB Code	Water body Name	Cause of 303(d) listing
446	N	IA 05-CHA-00301_0	CHARITON RIVER	E. COLI
447	N	IA 05-CHA-00302_0	CHARITON CREEK	E. COLI
448	N	IA 05-CHA-00325-L_0	CENTERVILLE RESERVOIR UPPER	FISH ADVISORIES-MERCURY
449	N	IA 05-CHA-0040_0	COOPER CREEK	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
450	N	IA 05-CHA-0056_0	HONEY CREEK	E. COLI
451	N	IA 05-CHA-0057_0	UNNAMED TRIBUTARY TO RATHBUN RESERVOIR	FISH KILL(S)
452	N	IA 05-CHA-0060_1	SOUTH FORK CHARITON RIVER	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
453	N	IA 05-CHA-0060_1	SOUTH FORK CHARITON RIVER	E. COLI
454	N	IA 05-CHA-0060_2	SOUTH FORK CHARITON RIVER	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
455	N	IA 05-CHA-0060_2	SOUTH FORK CHARITON RIVER	E. COLI
456	N	IA 05-CHA-0061_0	WALKER BRANCH	E. COLI
457	N	IA 05-CHA-0062_0	JORDAN CREEK	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
458	N	IA 05-CHA-0062_0	JORDAN CREEK	E. COLI
459	N	IA 05-CHA-0063_0	JACKSON CREEK	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
460	N	IA 05-CHA-0063_0	JACKSON CREEK	E. COLI
461	N	IA 05-CHA-0064_0	WEST JACKSON CREEK	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
462	N	IA 05-CHA-0066_0	NINEMILE CREEK	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
463	N	IA 05-CHA-0066_0	NINEMILE CREEK	E. COLI
464	N	IA 05-CHA-0067_0	DICK CREEK	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
465	N	IA 05-CHA-0068_0	HONEY CREEK	E. COLI
466	N	IA 05-CHA-00690-L_0	BOB WHITE LAKE	ALGAL GRWTH/CHLOROPHYLL A

Count	New listing	ADB Code	Water body Name	Cause of 303(d) listing
467	N	IA 05-CHA-00690-L_0	BOB WHITE LAKE	E. COLI
468	Y	IA 05-CHA-00690-L_0	BOB WHITE LAKE	SECCHI DISK TRANSPARENCY
469	N	IA 05-CHA-0070_0	WOLF CREEK	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
470	N	IA 05-CHA-0070_0	WOLF CREEK	E. COLI
471	N	IA 05-CHA-0077_0	FIVEMILE CREEK	AMMONIA
472	N	IA 05-CHA-0077_0	FIVEMILE CREEK	E. COLI
473	N	IA 05-GRA-0030_0	EAST FORK MEDICINE CREEK	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
474	N	IA 05-GRA-0040_0	THOMPSON RIVER	E. COLI
475	N	IA 05-GRA-0070_0	WELDON RIVER	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
476	N	IA 05-GRA-0080_0	LITTLE RIVER	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
477	N	IA 05-GRA-00810-L_0	LITTLE RIVER WATERSHED LAKE	SECCHI DISK TRANSPARENCY
478	N	IA 05-GRA-01010-L_0	NINE EAGLES LAKE	E. COLI
479	N	IA 05-GRA-01010-L_0	NINE EAGLES LAKE	FISH ADVISORIES-MERCURY
480	N	IA 05-GRA-01410-L_0	THAYER LAKE	ALGAL GRWTH/CHLOROPHYLL A
481	N	IA 05-GRA-01410-L_0	THAYER LAKE	SECCHI DISK TRANSPARENCY
482	N	IA 05-GRA-0170_0	LOTTS CREEK	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
483	N	IA 05-GRA-0180_0	MIDDLE FORK GRAND RIVER	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
484	N	IA 05-NOD-0020_0	NODAWAY RIVER (AKA WEST NODAWAY R.)	E. COLI
485	N	IA 05-NOD-0030_1	EAST NODAWAY RIVER	E. COLI
486	N	IA 05-NOD-0030_2	EAST NODAWAY RIVER	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
487	N	IA 05-NOD-00485-L_0	ORIENT LAKE	ALGAL GRWTH/CHLOROPHYLL A

Count	New listing	ADB Code	Water body Name	Cause of 303(d) listing
488	N	IA 05-NOD-00485-L_0	ORIENT LAKE	PH
489	N	IA 05-NOD-0070_0	MIDDLE NODAWAY RIVER	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
490	N	IA 05-NOD-00820-L_0	MORMON TRAIL LAKE	FISH ADVISORIES-MERCURY
491	N	IA 05-NOD-00930-L_0	VIKING LAKE	ALGAL GRWTH/CHLOROPHYLL A
492	N	IA 05-NOD-00930-L_0	VIKING LAKE	E. COLI
493	Y	IA 05-NSH-0010_0	NISHNABOTNA RIVER	E. COLI
494	N	IA 05-NSH-0020_1	EAST NISHNABOTNA RIVER	E. COLI
495	N	IA 05-NSH-0020_2	EAST NISHNABOTNA RIVER	E. COLI
496	N	IA 05-NSH-00310-L_0	COLD SPRINGS LAKE	SECCHI DISK TRANSPARENCY
497	Y	IA 05-NSH-00580-L_0	LAKE ANITA	ALGAL GRWTH/CHLOROPHYLL A
498	N	IA 05-NSH-00580-L_0	LAKE ANITA	E. COLI
499	N	IA 05-NSH-0060_0	TROUBLESOME CREEK	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
500	N	IA 05-NSH-0080_1	WEST NISHNABOTNA RIVER	E. COLI
501	N	IA 05-NSH-0090_3	WEST NISHNABOTNA RIVER	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
502	N	IA 05-NSH-0090_4	WEST NISHNABOTNA RIVER	FISH KILL(S)
503	N	IA 05-NSH-0120_0	SILVER CREEK	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
504	N	IA 05-NSH-0128_0	MUD CREEK	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
505	N	IA 05-NSH-0133_0	JORDAN CREEK	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
506	N	IA 05-NSH-01440-L_0	PRAIRIE ROSE LAKE	ALGAL GRWTH/CHLOROPHYLL A
507	Y	IA 05-NSH-01440-L_0	PRAIRIE ROSE LAKE	E COLI
508	N	IA 05-NSH-01440-L_0	PRAIRIE ROSE LAKE	PH

Count	New listing	ADB Code	Water body Name	Cause of 303(d) listing
509	N	IA 05-NSH-01440-L_0	PRAIRIE ROSE LAKE	SECCHI DISK TRANSPARENCY
510	N	IA 05-PLA-0015-L_0	SANDS TIMBER LAKE (AKA BLOCKTON RESERVOIR)	TURBIDITY
511	N	IA 05-PLA-0020_0	PLATTE RIVER	FISH KILL(S)
512	N	IA 05-PLA-0021_0	PLATTE RIVER	FISH KILL(S)
513	Y	IA 05-PLA-00285-L_0	MC KINLEY LAKE	FISH CONSUMPTION ADVISORY - PCBS
514	N	IA 05-PLA-00295-L_0	GREEN VALLEY LAKE	ALGAL GRWTH/CHLOROPHYLL A
515	N	IA 05-PLA-00380-L_0	WILSON PARK LAKE	ALGAL GRWTH/CHLOROPHYLL A
516	N	IA 05-PLA-0040_1	WEST BRANCH ONE HUNDRED AND TWO RIVER	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
517	N	IA 05-PLA-00430-L_0	WINDMILL LAKE	ALGAL GRWTH/CHLOROPHYLL A
518	N	IA 05-PLA-00430-L_0	WINDMILL LAKE	SECCHI DISK TRANSPARENCY
519	N	IA 05-TAR-0020_0	WEST TARKIO CREEK	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
<b>Western Iowa River Basins</b>				
520	N	IA 06-BOY-0020_1	BOYER RIVER	E. COLI
521	Y	IA 06-BOY-00510-L_0	YELLOW SMOKE PARK LAKE	FISH ADVISORIES-MERCURY
522	N	IA 06-BSR-0010_3	BIG SIOUX RIVER	FISH KILL(S)
523	N	IA 06-BSR-0021_0	PERRY CREEK	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
524	N	IA 06-BSR-0023_0	BROKEN KETTLE CREEK	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
525	N	IA 06-BSR-0027_0	INDIAN CREEK	E. COLI
526	N	IA 06-BSR-00280-L_0	LAKE PAHOJA	ALGAL GRWTH/CHLOROPHYLL A
527	Y	IA 06-BSR-00280-L_0	LAKE PAHOJA	PH

Count	New listing	ADB Code	Water body Name	Cause of 303(d) listing
528	N	IA 06-BSR-0029_0	SIXMILE CREEK	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
529	N	IA 06-BSR-0029_0	SIXMILE CREEK	E. COLI
530	N	IA 06-BSR-0030_0	ROCK RIVER	E. COLI
531	N	IA 06-BSR-0030_0	ROCK RIVER	FISH KILL(S)
532	N	IA 06-BSR-0035_0	DRY CREEK	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
533	N	IA 06-BSR-0035_0	DRY CREEK	FISH KILL(S)
534	N	IA 06-BSR-0040_1	ROCK RIVER	E. COLI
535	N	IA 06-BSR-0040_2	ROCK RIVER	E. COLI
536	N	IA 06-BSR-0060_1	LITTLE ROCK RIVER	E. COLI
537	N	IA 06-BSR-0060_3	LITTLE ROCK RIVER	E. COLI
538	N	IA 06-BSR-0065_0	UNNAMED TRIBUTARY TO LITTLE ROCK RIVER	FISH KILL(S)
539	N	IA 06-BSR-0070_3	OTTER CREEK	FISH KILL(S)
540	N	IA 06-BSR-0072_0	OTTER CREEK	FISH KILL(S)
541	N	IA 06-BSR-0080_0	MUD CREEK	FISH KILL(S)
542	N	IA 06-BSR-0080_0	MUD CREEK	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
543	N	IA 06-BSR-0080_0	MUD CREEK	E. COLI
544	N	IA 06-FLO-0010_0	FLOYD RIVER	E. COLI
545	N	IA 06-FLO-0020_1	FLOYD RIVER	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
546	N	IA 06-FLO-0020_2	FLOYD RIVER	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
547	N	IA 06-FLO-0020_2	FLOYD RIVER	FISH KILL(S)
548	N	IA 06-FLO-0021_0	FLOYD RIVER	FISH KILL(S)

Count	New listing	ADB Code	Water body Name	Cause of 303(d) listing
549	N	IA 06-FLO-0040_0	WEST BRANCH FLOYD RIVER	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
550	N	IA 06-FLO-0065_0	WILLOW CREEK	FISH KILL(S)
551	N	IA 06-FLO-0070_0	DEEP CREEK	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
552	Y	IA 06-LSR-0010_0	LITTLE SIOUX RIVER	E COLI
553	N	IA 06-LSR-0020_1	LITTLE SIOUX RIVER	E. COLI
554	N	IA 06-LSR-00250-L_0	LITTLE SIOUX PARK LAKE	PH
555	N	IA 06-LSR-0030_1	LITTLE SIOUX RIVER	E. COLI
556	N	IA 06-LSR-0030_4	LITTLE SIOUX RIVER	E. COLI
557	N	IA 06-LSR-0040_1	LITTLE SIOUX RIVER	E. COLI
558	N	IA 06-LSR-0040_2	LITTLE SIOUX RIVER	E. COLI
559	N	IA 06-LSR-0040_3	LITTLE SIOUX RIVER	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
560	N	IA 06-LSR-0070_1	MAPLE RIVER	E. COLI
561	N	IA 06-LSR-00805-L_0	MOOREHEAD PARK POND	PH
562	N	IA 06-LSR-0120_1	WEST FORK LITTLE SIOUX RIVER	E. COLI
563	N	IA 06-LSR-0120_2	WEST FORK LITTLE SIOUX RIVER	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
564	N	IA 06-LSR-0131_0	WEST FORK LITTLE SIOUX RIVER	FISH KILL(S)
565	N	IA 06-LSR-0143_0	JOHNS CREEK	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
566	N	IA 06-LSR-01495_0	ASHTON CREEK	LOW DISSOLVED OXYGEN
567	N	IA 06-LSR-0150_0	WILLOW CREEK	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
568	N	IA 06-LSR-0170_0	MILL CREEK	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
569	N	IA 06-LSR-0223_0	WILLOW CREEK	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY

Count	New listing	ADB Code	Water body Name	Cause of 303(d) listing
570	N	IA 06-LSR-0223_0	WILLOW CREEK	FISH KILL(S)
571	Y	IA 06-LSR-0223_0	WILLOW CREEK	E COLI
572	N	IA 06-LSR-0224_0	WILLOW CREEK	FISH KILL(S)
573	Y	IA 06-LSR-0224_0	WILLOW CREEK	E COLI
574	N	IA 06-LSR-02330-L_0	VIRGIN LAKE	ALGAL GRWTH/CHLOROPHYLL A
575	N	IA 06-LSR-02330-L_0	VIRGIN LAKE	SECCHI DISK TRANSPARENCY
576	Y	IA 06-LSR-02393-L_0	BLUEWING MARSH	ALGAL GRWTH/CHLOROPHYLL A
577	N	IA 06-LSR-02420-L_0	DAN GREENE SLOUGH	ALGAL GRWTH/CHLOROPHYLL A
578	N	IA 06-LSR-02420-L_0	DAN GREENE SLOUGH	SECCHI DISK TRANSPARENCY
579	N	IA 06-LSR-0250_0	OCHEYEDAN RIVER	E. COLI
580	N	IA 06-LSR-0270_0	STONY CREEK	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
581	N	IA 06-LSR-02840-L_2	WEST OKOBOJI LAKE	E. COLI
582	N	IA 06-LSR-02850-L_0	BIG SPIRIT LAKE	E. COLI
583	N	IA 06-LSR-0305_0	MILFORD CREEK	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
584	N	IA 06-SOL-0010_1	SOLDIER RIVER	E. COLI
585	N	IA 06-WED-0003_2	PLUM CREEK	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
586	N	IA 06-WED-0010_1	KEG CREEK	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
587	N	IA 06-WED-0010_2	KEG CREEK	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
588	N	IA 06-WED-0020_1	MOSQUITO CREEK	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
589	N	IA 06-WED-0020_2	MOSQUITO CREEK	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY
590	N	IA 06-WED-0020_3	MOSQUITO CREEK	CAUSE UNKNOWN - BIOLOGICAL INTEGRITY

Count	New listing	ADB Code	Water body Name	Cause of 303(d) listing
591	N	IA 06-WED-00270-L_0	ARROWHEAD POND	ALGAL GRWTH/CHLOROPHYLL A
592	N	IA 06-WED-00270-L_0	ARROWHEAD POND	FISH KILL(S)
593	N	IA 06-WEM-0020_2	MISSOURI RIVER	ARSENIC
594	N	IA 06-WEM-00235-L_0	LAKE MANAWA	ALGAL GRWTH/CHLOROPHYLL A
595	N	IA 06-WEM-00235-L_0	LAKE MANAWA	SECCHI DISK TRANSPARENCY
596	N	IA 06-WEM-00265-L_0	CARTER LAKE	FISH ADVISORIES (PCB)
597	N	IA 06-WEM-00265-L_0	CARTER LAKE	LOW DISSOLVED OXYGEN
598	Y	IA 06-WEM-00265-L_0	CARTER LAKE	TURBIDITY
599	N	IA 06-WEM-00340-L_0	DESOTO BEND	ALGAL GRWTH/CHLOROPHYLL A
600	N	IA 06-WEM-00340-L_0	DESOTO BEND	SECCHI DISK TRANSPARENCY
601	N	IA 06-WEM-00485-L_0	BROWNS LAKE	E. COLI
602	N	IA 06-WEM-00485-L_0	BROWNS LAKE	SECCHI DISK TRANSPARENCY