

# **DECISION DOCUMENT OF THE 2010 IOWA CLEAN WATER ACT, SECTION 303(D) LIST WATER QUALITY LIMITED SEGMENTS STILL REQUIRING TMDLS**

## **I. EXECUTIVE SUMMARY**

On May 27, 2011, the Iowa Department of Natural Resources submitted its 2010 update to its Clean Water Act (CWA or the Act) Section 303(d) List to the United States Environmental Protection Agency 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 55 water body segments representing 89 impairments and the addition of 104 water body segments representing 112 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 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 2010 submittal is an update to the state's most recently approved CWA Section 303(d) List, approved by the EPA on August 4, 2010 (i.e., the state's 2008 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 2010 assessment methodology includes revisions to the methodology utilized to develop the 2008 CWA Section 303(d) List for Iowa. Water quality data that meet the assessment criteria included within the state's 2010 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 2010 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 2008 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 2010 submission, the current CWA Section 303(d) List in the state of Iowa contains:

- approved removals from the 2008 CWA Section 303(d) List (Table 1); and
- an approved 2010 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 Federal Register [FR] 33040, 33045 [July 24, 1992], and the EPA's 1991 Guidance).

## **III. IOWA'S APPROACH TO IDENTIFYING WATERS FOR THE 2010 SECTION 303(D) LIST**

### **A. Iowa's 2010 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 2010 Iowa submission under CWA Section 303(d) is the fourth submission by the state of Iowa using this "integrated report" format. Category 5 of the 2010 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 9 water body segments attaining all designated uses and no use is threatened.

Category 2 consists of 376 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 1,257 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 162 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 474 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 628 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 253 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. Subcategory 3b is also divided 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 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 three 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 2010 Methodology**

The IDNR's "Methodology for Iowa's 2010 Water Quality Assessment, Listing, and Reporting Pursuant to Sections 305(b) and 303(d) of the Federal Clean Water Act," (April 2011), 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 2010 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) assessing the magnitude of impairment for bacterial impairment based on the magnitude of exceedance of the geometric mean water quality standard, 2) biological impairments are now based on a minimum of two assessments undertaken over a five year time frame, 3) the addition of subcategories 2b-c, -u and 3b-c and -u as well as 5b-t and -v to clarify the biological assessment data used to determine the impairment, and 4) identification of new EPA-approved water quality standards.

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 as part of a current effort to establish biological criteria for Iowa's ecoregions and subcoregions and as part of the on-going Regional Environmental Monitoring and Assessment Program project;
- 4) Data from the IDNR-sponsored statewide lake monitoring project conducted by the Iowa State University and the University of Iowa Hygienic Laboratory;
- 5) Data from monitoring of bacterial indicators in rivers and at beaches of publicly-owned lakes;
- 6) Data from programs to monitor fish tissue for toxic contaminants;
- 7) Reports of pollutant-caused fish kills;
- 8) Data, when available, from public water supplies on the quality of raw and finished water;
- 9) Drinking water source assessments under Section 1453 of the Safe Drinking Water Act;

- 10) Data from special studies of water quality and aquatic communities;
- 11) Best professional judgment of the IDNR staff;
- 12) Results of volunteer monitoring (e.g., by IOWATER trained volunteers); and
- 13) 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 2010 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 305(b) and 303(d) for data assembly and evaluation for border rivers and waters flowing into the state.

#### **IV. EPA ANALYSIS OF IOWA'S APPROACH TO LISTING WATERS FOR THE 2010 LIST**

The EPA is approving Iowa's 2010 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 2010 assessment methodology identifies a general "cutoff date" as the end of calendar year 2008, 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 2010 assessment should be considered for the 2012 submission. Despite the application of a "cutoff date" by the IDNR for the development of the 2010 list, the IDNR considered data submitted as part of the state's public notice and comment period from January 18, 2011 through March 4, 2011. 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 2010 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 2010 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. Part 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, and all waters proposed for delisting.

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

The EPA compared waters listed in Category 5 of the state's 2008 IR with waters listed in Category 5 of the state's 2010 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 2010 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 2010 CWA Section 303(d) List.

In its review of the state's 2010 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 2010 CWA Section 303(d) List (Category 5 of their 2010 IR), consisting of a total of 474 water bodies with 628 water body / pollutant combinations.

Waters proposed by the IDNR for exclusion from Category 5 of Iowa's 2010 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 56 water bodies to determine whether the IDNR had "good cause" for modifying or not including these waters on its 2010 CWA Section 303(d) List.

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

The EPA is approving the modification to or removal of 56 water bodies 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 water or waters on the list. The reasons for each delisting were included in the ADB 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.
- The state review identified flaws in original listings, attributable to errors associated with segment identifiers, or the use of inapplicable criteria.
- An enforcement action has been undertaken to address the cause of a fish kill.

The rationale supporting the removal of these 56 waters from the state's list can be grouped into three general categories and are also identified below.

**1. Waters with Approved TMDLs or alternatives (43 waters)**

**a) TMDLs (23 waters listed by water body identification number)**

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 Integrated Report 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.

**Silver Lake (IA 01-MAQ-0680-L\_0)** Iowa previously listed Silver Lake as impaired for pH, algal growth and dissolved oxygen. On December 12, 2009, the EPA approved an Iowa TMDL for pH, algal growth and dissolved oxygen. 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 Silver Creek because it no longer requires the development of a TMDL for pH, algal growth or dissolved oxygen, consistent with 40 C.F.R. 130.7(b).

**Mississippi River (IA 01-NEM-0010\_4)** Iowa previously listed the Mississippi River as impaired for nutrients. On January 9, 2010, the EPA established a TMDL for nutrients. As such, this water body/pollutant pair are appropriate for removal from Iowa's § 303(d) List. In today's action, the EPA is approving delisting of the Mississippi River because it no longer requires the development of a TMDL for nutrients, consistent with 40 C.F.R. 130.7(b).

**Cedar River and Shell Rock River (IA 02-CED-0020\_2, 02-CED-0020\_3, 02-CED-0030\_1, 02-CED-0030\_2, 02-CED-0040\_1, 02-CED-0050-L\_0, 02-CED-0110\_2, 02-CED-0110\_3 and 02-SHL-0020\_1)** Iowa previously listed eight segments of the Cedar River and one segment of the Shell Rock River as impaired for bacteria. On February 26, 2010, the EPA established a TMDL for *E. coli* bacteria. 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 these segments of the Cedar River and Shell Rock River because they no longer require the development of a TMDL for bacteria, consistent with 40 C.F.R. 130.7(b).

**Union Grove Lake (IA 02-IOW-02195-L\_0)** Iowa previously listed Union Grove Lake as impaired for algal growth, *E. coli*, pH and Secchi Disk transparency (turbidity). On December 6, 2010, the EPA approved an Iowa TMDL for algal growth, *E. coli*, pH, and Secchi transparency (turbidity). 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 Union Grove Lake because it no longer requires the development of a TMDL for algal growth, *E. coli*, pH, or Secchi Disk transparency (turbidity), consistent with 40 C.F.R. 130.7(b).

**Ventura Marsh (IA 02-WIN-00465-L\_0)** Iowa previously listed Ventura Marsh as impaired for algal growth and Secchi Disk transparency (turbidity). On March 24, 2010, the EPA established a TMDL for algal growth and Secchi Disk transparency (turbidity). 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 Ventura Marsh because it no longer requires the development of a TMDL for algal growth or Secchi Disk transparency (turbidity), consistent with 40 C.F.R. 130.7(b).

**Des Moines River (IA 04-LDM-0040\_1, 04-LDM-0040\_2, 04-LDM-0040\_3, 04-UDM-0010\_1 and 04-UDM-0010\_2)** Iowa previously listed five segments of the Des Moines River as impaired for bacteria. On March 5, 2010, the EPA approved an Iowa TMDL for *E. coli* bacteria. 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 these segments of the Des Moines River because they no longer require the development of a TMDL for bacteria, consistent with 40 C.F.R. 130.7(b).

**Cedar Lake (IA 04-LDM-03085-L\_0)** Iowa previously listed Cedar Lake as impaired for atrazine. On March 19, 2010, the EPA established a TMDL 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 Cedar Lake because it no longer requires the development of a TMDL for atrazine, consistent with 40 C.F.R. 130.7(b).

**North Raccoon River (IA 04-RAC-0050\_2)** Iowa previously listed the North Raccoon River as impaired for bacteria. On June 24, 2008, the EPA approved an Iowa TMDL for *E. coli* 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 North Raccoon River because it no longer requires the development of a TMDL for bacteria, consistent with 40 C.F.R. 130.7(b).

**Des Moines River (IA 04-UDM-0010\_2)** Iowa previously listed the Des Moines River as impaired for nitrate. On September 25, 2009, the EPA approved an Iowa TMDL for nitrate. 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 Des Moines River because it no longer requires the development of a TMDL for nitrate, consistent with 40 C.F.R. 130.7(b).

**Lost Island Lake (IA 06-LSR-02390-L\_0)** Iowa previously listed Lost Island Lake as impaired for Secchi Disk transparency (turbidity). On February 5, 2009, the EPA approved an Iowa TMDL for Secchi Disk transparency (turbidity). 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 Lost Island Lake because it no longer requires the development of a TMDL for Secchi Disk transparency (turbidity), consistent with 40 C.F.R. 130.7(b).

**Silver Lake (IA 06-LSR-03105-L\_0)** Iowa previously listed Silver Lake as impaired for Secchi Disk transparency (turbidity). On September 9, 2009, the EPA approved an Iowa TMDL for Secchi Disk transparency (turbidity). 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 Silver Lake because it no longer requires the development of a TMDL for Secchi Disk transparency (turbidity), consistent with 40 C.F.R. 130.7(b).

**b) Impairment not caused by a pollutant (1 water)**

**North Skunk River (IA 03-NSK-0030\_0)** Iowa previously listed the North Skunk River as impaired based on a survey of fish and aquatic macroinvertebrates. As part of Iowa's § 303(d) submittal of May 27, 2011, a rationale was submitted which concluded that the impaired biological community was not the result of a pollutant but by habitat alteration. 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 North Skunk River because it no longer requires the development of a TMDL for an impaired fish and aquatic macroinvertebrates, consistent with 40 C.F.R. § 130.7(b).

**c) Other pollution control requirements (19 waters listed by water body identification number)**

Nineteen 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. There have been no additional fish kills in these segments:

**Plum Creek (IA 01-MAQ-0220\_1)** Iowa previously listed Plum Creek as impaired because of fish kills. A responsible party was identified and restitution was sought for the results of the fish kill caused by runoff from a dairy feedlot.

**Conduit Creek (IA 01-NEM-0081\_0)** Iowa previously listed Conduit Creek as impaired because of fish kills. A responsible party was identified and restitution was sought for the results of the fish kill caused by a manure discharge.

**Unnamed Tributary to Point Hollow Creek (IA 01-TRK-02415\_0)** Iowa previously listed the Unnamed Tributary to Point Hollow Creek as impaired because of fish kills. A responsible party was identified and restitution was sought for the results of the fish kill caused by runoff from an open feedlot.

**Roberts Creek (IA 01-TRK-0360\_3)** Iowa previously listed Roberts Creek as impaired because of fish kills. A responsible party was identified and restitution was sought for the results of the fish kill caused by a release of hog manure from an over-filled storage pit.

**Prairie Creek (IA 02-CED-0220\_2)** Iowa previously listed Prairie Creek as impaired because of fish kills. A responsible party was identified and restitution was sought for the results of the fish kill caused by runoff from an open feedlot.

**Otter Creek (IA 02-IOW-0086\_0)** Iowa previously listed Otter Creek as impaired because of fish kills. A responsible party was identified and restitution was sought for the results of the fish kill caused by a manure spill from a hog confinement facility.

**School Creek (IA 02-IOW-0342\_0)** Iowa previously listed School Creek as impaired because of fish kills. A responsible party was identified and restitution was sought for the results of the fish kill caused by a spill of fatty acids, glycerin and soybean oil.

**Short Creek (IA 02-IOW-0450\_0)** Iowa previously listed Short Creek as impaired because of fish kills. A responsible party was identified and restitution was sought for the results of the fish kill caused by a manure spill from an open hog feedlot.

**Unnamed Tributary to Short Creek (IA 02-IOW-0451\_0)** Iowa previously listed the Unnamed Tributary to Short Creek as impaired because of fish kills. A responsible party was identified and restitution was sought for the results of the fish kill caused by a manure release from an abandoned hog confinement facility.

**North Skunk River (IA 03-NSK-0030\_0)** Iowa previously listed the North Skunk River as impaired because of fish kills. A responsible party was identified and restitution was sought for the results of the fish kill caused by runoff from an open feedlot.

**Crow Creek (IA 03-SKU-0116\_0)** Iowa previously listed the Crow Creek as impaired because of fish kills. A responsible party was identified and restitution was sought for the results of the fish kill caused by discharges from a fertilizer plant.

**Unnamed Tributary to South Skunk River (IA 03-SSK-0130\_0)** Iowa previously listed the Unnamed Tributary to the South Skunk River as impaired because of fish kills. A responsible party was identified and restitution was sought for the results of the fish kill caused by animal waste from a hog confinement facility.

**Sugar Creek (IA 04-LDM-0119\_0)** Iowa previously listed the Sugar Creek as impaired because of fish kills. A responsible party was identified and restitution was sought for the results of the fish kill caused by a spill of sulfuric acid from an industrial facility.

**Lake Creek (IA 04-RAC-0130\_2)** Iowa previously listed the Lake Creek as impaired because of fish kills. A responsible party was identified and restitution was sought for the results of the fish kill caused by manure runoff.

**Lateral 6 (IA 04-RAC-01700\_0)** Iowa previously listed the Lateral 6 as impaired because of fish kills. A responsible party was identified and restitution was sought for the results of the fish kill caused by a spill from an industrial truck wash lagoon.

**Elk Creek (IA 06-BOY-0045\_0)** Iowa previously listed the Elk Creek as impaired because of fish kills. A responsible party was identified and restitution was sought for the results of the fish kill caused by a spill of hog manure.

**Deep Creek (IA 06-FLO-0070\_0)** Iowa previously listed the Deep Creek as impaired because of fish kills. A responsible party was identified and restitution was sought for the results of the fish kill caused by runoff from a dairy feedlot.

**New Farmer Ditch [aka Garretson Outlet Ditch] (IA 06-LSR-0125\_0)** Iowa previously listed New Farmer Ditch [aka Garretson Outlet Ditch] as impaired because of fish kills. A responsible party was identified and restitution was sought for the results of the fish kill caused by application of an aquatic herbicide.

**Stony Creek (IA 06-LSR-0271\_0)** Iowa previously listed the Stony Creek as impaired because of fish kills. A responsible party was identified and restitution was sought for the results of the fish kill caused by animal waste.

## **2. New Data Supports Change in Listing (9 waters)**

Nine 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:

**Yellow River (IA 01-YEL-0080\_3)** Iowa previously listed the Yellow River as impaired for 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

Yellow River because it no longer requires the development of a TMDL for dissolved oxygen, consistent with 40 C.F.R. § 130.7(b).

**Clear Creek (IA 02-IOW-0161\_0)** Iowa previously listed Clear Creek as impaired by sewage. A follow-up investigation of this water body on July 1, 2009, indicates the previous condition has been remediated and untreated sewage no longer impairs this water body. 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 Clear Creek because it no longer requires the development of a TMDL for sewage, consistent with 40 C.F.R. § 130.7(b).

**Unnamed Tributary to Clear Creek (IA 02-IOW-01615\_0)** Iowa previously listed this Unnamed Tributary to Clear Creek as impaired by sewage. A follow-up investigation of this water body on July 1, 2009, indicates the previous condition has been remediated and untreated sewage no longer impairs this water body. 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 Clear Creek because it no longer requires the development of a TMDL for sewage, consistent with 40 C.F.R. § 130.7(b).

**Shell Rock River (IA 02-SHL-0010\_2)** Iowa previously listed Shell Rock River as impaired by bacteria. New monitoring data indicates this water body is attaining Iowa's EPA-approved WQS for 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 Shell Rock River because it no longer requires the development of a TMDL for bacteria, consistent with 40 C.F.R. § 130.7(b).

**White Oak Conservation Area Lake (IA 03-SSK-00118-L\_0)** Iowa previously listed the White Oak Conservation Area Lake as impaired for Secchi Disk transparency (turbidity). Monitoring data indicates low concentrations of inorganic suspended solids. 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 White Oak Conservation Area Lake because it no longer requires the development of a TMDL for Secchi Disk transparency (turbidity), consistent with 40 C.F.R. § 130.7(b). This water body remains 303(d) listed for pH and algal growth.

**Hooper Area Pond (IA 04-LDM-02718-L\_0)** Iowa previously listed Hooper Area Pond as impaired for 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 the Hooper Area Pond because it no longer requires the development of a TMDL for pH, consistent with 40 C.F.R. § 130.7(b).

**Cold Springs Lake (IA 05-NSH-00310-L\_0)** Iowa previously listed Cold Springs Lake as impaired for algal growth and pH. New monitoring data indicates this water body is attaining Iowa's EPA-approved WQS for pH and narrative methodology for algal growth. 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 the Cold Springs Lake because it no longer requires the development of a TMDL for pH or algal growth, consistent with 40 C.F.R. § 130.7(b). This water body remains 303(d) listed for Secchi Disk transparency (turbidity)

**Wilson Park Lake (IA 05-PLA-00380-L\_0)** Iowa previously listed Wilson Park Lake as impaired for algal growth and 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 the Wilson Park Lake because it no longer requires the development of a TMDL for pH, consistent with 40 C.F.R. § 130.7(b). This water body remains 303(d) listed for algal growth.

**Windmill Lake (IA 05-PLA-00430-L\_0)** Iowa previously listed Windmill Lake as impaired for algal growth, Secchi Disk transparency (turbidity) and 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 the Windmill Lake because it no longer requires the development of a TMDL for pH, consistent with 40 C.F.R. § 130.7(b). This water body remains 303(d) listed for algal growth and Secchi Disk transparency (turbidity).

**Arrowhead Pond (IA 06-WED-00270-L\_0)** Iowa previously listed Arrowhead Pond as impaired for algal growth and 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 the Arrowhead Pond because it no longer requires the development of a TMDL for pH, consistent with 40 C.F.R. § 130.7(b). This water body remains 303(d) listed for algal growth and a fish kill.

### 3. Listing Error (4 waters)

For these four water bodies an error was made in the assessment of information which led to the listing of these water bodies in Category 5 of the Iowa 2008 IR.

**North Fork Maquoketa River (IA 01-NMQ-0010\_2)** Iowa previously listed this water body as biologically impaired based on a decline in freshwater mussels. Iowa's analysis has determined that the sample which indicated impairment was not collected in this segment but an adjacent segment. Iowa is delisting this segment and adding segment 01-NMQ-0020\_1, where the sample was collected, to its 2010 § 303(d) List. In today's action, the EPA is approving the delisting of the North Fork Maquoketa River because it no longer requires the development of a TMDL for a biological impairment, consistent with 40 C.F.R. § 130.7(b).

**Wapsipinicon River (IA 01-WPS-0010\_4)** Iowa previously listed this water body as biologically impaired based on a decline in freshwater mussels. Iowa's analysis has determined that the sample which indicated impairment was not collected in this segment but an adjacent segment. Iowa is delisting this segment and adding segment 01-WPS-0010\_5, where the sample was collected, to its 2010 § 303(d) List. In today's action, the EPA is approving the delisting of the Wapsipinicon River because it no longer requires the development of a TMDL for a biological impairment, consistent with 40 C.F.R. § 130.7(b). This water body remains on the Iowa § 303(d) List as impaired by bacteria.

**Iowa River (IA 02-IOW-0020\_2)** Iowa previously listed this water body as biologically impaired based on a decline in freshwater mussels. Iowa's analysis has determined that the sample which indicated impairment was not collected in this segment but an adjacent segment. Iowa is delisting this segment and adding segment 02-IOW-0020\_1, where the sample was

collected, to its 2010 § 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 a biological impairment, consistent with 40 C.F.R. § 130.7(b).

**Rathbun Reservoir (IA 05-CHA-0020-L\_0)** Iowa previously listed this water body as impaired by atrazine for drinking water supply. Iowa is correcting this listing as Rathbun Reservoir does not have a drinking water supply use designated. In today's action, the EPA is approving the delisting of the Rathbun Reservoir because it no longer requires the development of a TMDL for atrazine, 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 2010 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 2010 draft CWA Section 303(d) List from January 18, 2011 through March 4, 2011. 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 three individuals. A responsiveness summary was submitted by the state with its 2010 Integrated Report. The IDNR finalized its 2010 CWA Section 303(d) List and submitted it for approval on May 27, 2011; it was received by the EPA on June 6, 2011.

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 2010 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. The following terms are used in the tables and defined below.

BPJ:	Best Professional Judgment
Chl-a:	Chlorophyll- <i>a</i> is a measure of water productivity and algal content.
DO:	Dissolved oxygen
IBI:	Index of Biological Integrity

IDPH: Iowa Department of Public Health  
IR: Integrated Report  
MCL: Maximum Contaminant Level  
pH: A measure of water's acidity or basic condition.  
ppm: Parts per million  
Secchi: Secchi depth is a measure of water clarity.  
TSI: Carlson's Trophic State Index.  
WQ: Water Quality

**Table 1. Delistings from the EPA-approved 2008 Iowa § 303(d) List**

ADB Code	Waterbody Name	Des. Use Impaired during 2008 Cycle:	Cause of 2008 303(d) listing	Rationale for 303(d) listing in 2008 Cycle:	2008 IR Cat.	2010 IR Cat.	De-listing rationale
<b>Northeastern Iowa River Basins</b>							
<a href="#">IA 01-MAQ-00680-L 0</a>	Silver Lake	primary contact recreation	algae	aesthetically objectionable conditions: Chl-a trophic state index > 70.	5a	4a	TMDL approved by EPA 12/12/2009
<a href="#">IA 01-MAQ-00680-L 0</a>	Silver Lake	aquatic life	low DO	> 10% of samples violate WQ criteria	5a	4a	TMDL approved by EPA 12/12/2009
<a href="#">IA 01-MAQ-00680-L 0</a>	Silver Lake	primary contact recreation	pH	> 10% of samples violate WQ criteria	5a	4a	TMDL approved by EPA 12/12/2009
<a href="#">IA 01-MAQ-00680-L 0</a>	Silver Lake	aquatic life	pH	> 10% of samples violate WQ criteria	5a	4a	TMDL approved by EPA 12/12/2009
<a href="#">IA 01-MAQ-0220 1</a>	Plum Creek	aquatic life	biological: fish kill	fish kill	5b	4d	Restitution sought & or received for July 2007 fish kill caused runoff from dairy feedlot
<a href="#">IA 01-NEM-0010 4</a>	Mississippi River	general uses	nutrients	aesthetically objectionable conditions and nuisance aquatic life.	5a	4a	TMDL established by EPA 01/09/2010
<a href="#">IA 01-NEM-0081 0</a>	Conduit Creek	aquatic life	biological: fish kill	fish kill in August 2006.	5b	4d	Restitution sought & or received for August 2006 fish kill caused by manure discharge
<a href="#">IA 01-NMQ-0010 1</a>	North Fork Maquoketa River	aquatic life	biological: unknown impact on freshwater mussels	> 50% decline in mussel species richness; impairments potentially include flow alteration, habitat modification, nutrients, and/or siltation	5b	3a	Error in assessment: impairment was incorrectly applied to this stream segment; should have been applied to upstream segment, IA 01-NMQ-0020_1.
<a href="#">IA 01-TRK-02415 0</a>	Unnamed Tributary to Point Hollow Creek	aquatic life	biological: fish kill: ammonia and low DO	Fish kill in 2004 caused by animal waste.	5b	4d	Restitution sought & or received for August 2004 fish kill caused by open feedlot runoff

ADB Code	Waterbody Name	Des. Use Impaired during 2008 Cycle:	Cause of 2008 303(d) listing	Rationale for 303(d) listing in 2008 Cycle:	2008 IR Cat.	2010 IR Cat.	De-listing rationale
<a href="#">IA 01-TRK-0360_3</a>	Roberts Creek	aquatic life	biological: fish kill: ammonia and low DO	Fish kill in 2005 caused by animal waste.	5b	4d	Restitution sought & or received for August 2005 fish kill caused release of hog manure from an over-full storage pit
<a href="#">IA 01-WPS-0010_4</a>	Wapsipinicon River	aquatic life	biological: unknown impact on freshwater mussels	> 50% decline in mussel species richness; impairments potentially include flow alteration, habitat modification, nutrients, and/or siltation	5b	2a	FW mussel impairment was incorrectly applied to IA 01-WPS-0010_4 for past assessments; moved to WPS-0010_5 for the 2010 cycle.
<a href="#">IA 01-YEL-0080_3</a>	Yellow River	aquatic life	low DO	> 10% of samples violate WQ criteria	5a	2a	New (2006-08) data do not show impairment due to low levels of dissolved oxygen.
<b>Iowa-Cedar River Basin</b>							
<a href="#">IA 02-CED-0020_2</a>	Cedar River	primary contact recreation	bacteria	geometric mean > WQ criterion	5a	4a	TMDL established by EPA 02/26/2010
<a href="#">IA 02-CED-0020_3</a>	Cedar River	primary contact recreation	bacteria	geometric mean > WQ criterion	5a	4a	TMDL established by EPA 02/26/2010
<a href="#">IA 02-CED-0030_1</a>	Cedar River	primary contact recreation	bacteria	geometric mean > WQ criterion	5a	4a	TMDL established by EPA 02/26/2010
<a href="#">IA 02-CED-0030_2</a>	Cedar River	primary contact recreation	bacteria	> 10% of samples exceed single-sample maximum criterion	5a	4a	TMDL established by EPA 02/26/2010
<a href="#">IA 02-CED-0040_1</a>	Cedar River	primary contact recreation	bacteria	geometric mean > WQ criterion	5a	4a	TMDL established by EPA 02/26/2010
<a href="#">IA 02-CED-0050-L_0</a>	Cedar River	primary contact recreation	bacteria	> 10% of samples exceed single-sample maximum criterion	5a	4a	TMDL established by EPA 02/26/2010
<a href="#">IA 02-CED-0110_2</a>	Cedar River	primary contact recreation	bacteria	> 10% of samples exceed single-sample maximum criterion	5a	4a	TMDL established by EPA 02/26/2010

ADB Code	Waterbody Name	Des. Use Impaired during 2008 Cycle:	Cause of 2008 303(d) listing	Rationale for 303(d) listing in 2008 Cycle:	2008 IR Cat.	2010 IR Cat.	De-listing rationale
<a href="#">IA 02-CED-0110_3</a>	Cedar River	primary contact recreation	bacteria	geometric mean > WQ criterion	5a	4a	TMDL established by EPA 02/26/2010
<a href="#">IA 02-CED-0220_2</a>	Prairie Creek	aquatic life	biological: fish kill	Two fish kills in 2006, both caused by animal waste.	5b	4d	Restitution sought & or received for July 2006 fish kill caused by open feedlot runoff
<a href="#">IA 02-IOW-0020_2</a>	Iowa River	aquatic life	biological: unknown impact on freshwater mussels	> 50% decline in mussel species richness; impairments potentially include flow alteration, habitat modification, nutrients, and/or siltation	5b	3a	FW mussel impairment was incorrectly applied to IA 02-IOW-0020_2 for past assessments; moved to IOW-0020_1 for the 2010 cycle.
<a href="#">IA 02-IOW-0086_0</a>	Otter Creek	aquatic life	biological: fish kill	Fish kills in 2007 caused by animal waste.	5b	4d	Restitution sought & or received for August 2007 fish kill caused by a manure spill from hog confinement operation
<a href="#">IA 02-IOW-0161_0</a>	Clear Creek	general use	sewage (organic enrichment/Low DO)	aesthetically objectionable conditions	5a	2a	IDNR 2009 follow-up investigation shows impacts from untreated wastewater no longer exist.
<a href="#">IA 02-IOW-0161_0</a>	Clear Creek	primary contact recreation	sewage (organic enrichment/Low DO)	aesthetically objectionable conditions	5a	2a	IDNR 2009 follow-up investigation shows impacts from untreated wastewater no longer exist.
<a href="#">IA 02-IOW-0161_0</a>	Clear Creek	aquatic life	sewage (organic enrichment/Low DO)	aesthetically objectionable conditions	5a	2a	IDNR 2009 follow-up investigation shows impacts from untreated wastewater no longer exist.
<a href="#">IA 02-IOW-01615_0</a>	unnamed tributary to Clear Creek	general use	sewage (organic enrichment/Low DO)	aesthetically objectionable conditions	5a	2a	IDNR 2009 follow-up investigation shows impacts from untreated wastewater no longer exist.
<a href="#">IA 02-IOW-01615_0</a>	unnamed tributary to Clear Creek	primary contact recreation	sewage (organic enrichment/Low DO)	aesthetically objectionable conditions	5a	2a	IDNR 2009 follow-up investigation shows impacts from untreated wastewater no longer exist.

ADB Code	Waterbody Name	Des. Use Impaired during 2008 Cycle:	Cause of 2008 303(d) listing	Rationale for 303(d) listing in 2008 Cycle:	2008 IR Cat.	2010 IR Cat.	De-listing rationale
<a href="#">IA 02-IOW-01615_0</a>	unnamed tributary to Clear Creek	aquatic life	sewage (organic enrichment/ Low DO)	aesthetically objectionable conditions	5a	2a	IDNR 2009 follow-up investigation shows impacts from untreated wastewater no longer exist.
<a href="#">IA 02-IOW-02195-L_0</a>	Union Grove Lake	primary contact recreation	algae	aesthetically objectionable conditions: Chl-a trophic state index > 65	5a	4a	TMDL approved by EPA 12/06/2010
<a href="#">IA 02-IOW-02195-L_0</a>	Union Grove Lake	primary contact recreation	bacteria	geometric mean > WQ criterion	5a	4a	TMDL approved by EPA 12/06/2010
<a href="#">IA 02-IOW-02195-L_0</a>	Union Grove Lake	primary contact recreation	pH	> 10% of samples violate WQ criteria	5a	4a	TMDL approved by EPA 12/06/2010
<a href="#">IA 02-IOW-02195-L_0</a>	Union Grove Lake	primary contact recreation	turbidity	aesthetically objectionable conditions: Secchi trophic state index > 65	5a	4a	TMDL approved by EPA 12/06/2010
<a href="#">IA 02-IOW-0342_0</a>	School Creek	aquatic life	biological: fish kill	Fish kill in July 2006 caused by spill of fatty acids, glycerin, and soybean oil.	5b	4d	Restitution sought & or received for July 2006 fish kill caused by a spill that contained fatty acids, glycerin, and soybean oil.
<a href="#">IA 02-IOW-0450_0</a>	Short Creek	aquatic life	biological: fish kill	Fish kill in August 2007 caused by animal waste.	5b	4d	Restitution sought & or received for August 2007 fish kill caused by a manure spill from an open hog feedlot.
<a href="#">IA 02-IOW-0451_0</a>	Unnamed Tributary to Short Creek	aquatic life	biological: fish kill	Fish kill in June 2007 caused by animal waste.	5b	4d	Restitution sought & or received for June 2007 fish kill caused by a manure release from an abandoned hog confinement operation.
<a href="#">IA 02-SHL-0010_2</a>	Shell Rock River	primary contact recreation	bacteria	geometric mean > WQ criterion	5a	2a	New and historical data show low levels of indicator bacteria and full support of Class A1 uses.
<a href="#">IA 02-SHL-0020_1</a>	Shell Rock River	primary contact recreation	bacteria	> 10% of samples violate WQ criteria	5a	4a	TMDL established by EPA 02/26/2010

ADB Code	Waterbody Name	Des. Use Impaired during 2008 Cycle:	Cause of 2008 303(d) listing	Rationale for 303(d) listing in 2008 Cycle:	2008 IR Cat.	2010 IR Cat.	De-listing rationale
<a href="#">IA 02-WIN-00465-L_0</a>	Ventura Marsh	aquatic life	algae	aesthetically objectionable conditions, in part, due to common carp	5a	4a	TMDL established by EPA 03/24/2010
<a href="#">IA 02-WIN-00465-L_0</a>	Ventura Marsh	aquatic life	turbidity	aesthetically objectionable conditions, in part, due to common carp	5a	4a	TMDL established by EPA 03/24/2010
<b>Skunk River Basin</b>							
<a href="#">IA 03-NSK-0030_0</a>	North Skunk River	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates	low biotic index	5b	4c	Impairment believed to be due to non-pollutant stressor (habitat alteration); thus, not appropriate for IR Category 5.
<a href="#">IA 03-NSK-0030_0</a>	North Skunk River	aquatic life	biological: fish kill	Fish kill in August 2006 caused by animal waste.	5b	4d	Restitution sought & or received for August 2006 fish kill caused by runoff from an open hog feedlot
<a href="#">IA 03-SKU-0116_0</a>	Crow Creek	aquatic life	biological: fish kill	Fish kill in September 2007 caused by discharge of fertilizer and pesticides.	5b	4d	Restitution sought & or received for September 2007 fish kill caused by discharge of fertilizer and pesticides from a fertilizer plant
<a href="#">IA 03-SSK-00118-L_0</a>	White Oak Conservation Area Lake	primary contact recreation	turbidity	aesthetically objectionable conditions: Secchi trophic state index > 65	5a	2a	Monitoring data from 2004-2008 indicate, and IDNR Fisheries Bureau concurs, that levels of inorganic suspended solids are low and not impairing uses.
<a href="#">IA 03-SSK-0130_0</a>	Unnamed Tributary to South Skunk River	aquatic life	biological: fish kill	Fish kill in November 2007 caused by animal waste.	5b	4d	Restitution sought & or received for November 2007 fish kill caused by animal waste from a hog confinement.

ADB Code	Waterbody Name	Des. Use Impaired during 2008 Cycle:	Cause of 2008 303(d) listing	Rationale for 303(d) listing in 2008 Cycle:	2008 IR Cat.	2010 IR Cat.	De-listing rationale
<b>Des Moines River Basin</b>							
<a href="#">IA 04-LDM-0040_1</a>	Des Moines River	primary contact recreation	bacteria	geometric mean > WQ criterion	5a	4a	TMDL approved by EPA 03/05/2010
<a href="#">IA 04-LDM-0040_2</a>	Des Moines River	primary contact recreation	bacteria	geometric mean > WQ criterion	5a	4a	TMDL approved by EPA 03/05/2010
<a href="#">IA 04-LDM-0040_3</a>	Des Moines River	primary contact recreation	bacteria	geometric mean > WQ criterion	5a	4a	TMDL approved by EPA 03/05/2010
<a href="#">IA 04-LDM-0119_0</a>	Sugar Creek	aquatic life	biological: fish kill: industrial chemical	Fish kill in June 2004 caused by spill of industrial chemical (sulfuric acid).	5b	4d	Restitution sought & or received for June 2004 fish kill caused by spill of an industrial chemical (sulfuric acid).
<a href="#">IA 04-LDM-02718-L_0</a>	Hooper Area Pond	aquatic life	pH	< 10% of samples violate WQ criteria	5a	2a	New data: pH data from 2004-2008 do not suggest a pH-related impairment.
<a href="#">IA 04-LDM-03085-L_0</a>	Cedar Lake	drinking water	atrazine	average levels > atrazine MCL (3 ppb)	5a	4a	TMDL established by EPA 03/19/2010
<a href="#">IA 04-RAC-0050_2</a>	North Raccoon River	primary contact recreation	bacteria	geometric mean > WQ criterion	5p	4a	TMDL approved by EPA 06/24/2008
<a href="#">IA 04-RAC-0130_2</a>	Lake Creek	aquatic life	biological: fish kill: unknown	Fish kills in July 2005 and August 2006 (2006 kill caused by animal waste).	5b	4d	Restitution sought & or received for August 2006 fish kill caused by manure runoff
<a href="#">IA 04-RAC-01700_0</a>	Lateral 6	aquatic life	biological: fish kill: unknown	Fish kill in August 2007 caused by spill from an industrial truck wash lagoon.	5b	4d	Restitution sought & or received for August 2007 fish kill caused by a spill from an industrial truck wash lagoon.
<a href="#">IA 04-UDM-0010_1</a>	Des Moines River	primary contact recreation	bacteria	geometric mean > WQ criterion	5a	4a	TMDL approved by EPA 03/05/2010
<a href="#">IA 04-UDM-0010_2</a>	Des Moines River	drinking water	nitrate	> 10% of samples violate nitrate MCL (10 ppm)	5a	4a	TMDL approved by EPA 09/25/2009

ADB Code	Waterbody Name	Des. Use Impaired during 2008 Cycle:	Cause of 2008 303(d) listing	Rationale for 303(d) listing in 2008 Cycle:	2008 IR Cat.	2010 IR Cat.	De-listing rationale
<a href="#">IA 04-UDM-0010_2</a>	Des Moines River	primary contact recreation	bacteria	geometric mean > WQ criterion	5a	4a	TMDL approved by EPA 03/05/2010
<b>Southern Iowa River Basins</b>							
<a href="#">IA 05-CHA-0020-L_2</a>	Rathbun Reservoir	drinking water	atrazine	Average level in 2004-2006 greater than MCL.	5a	3a	Assessment error: segment not designated for drinking water uses.
<a href="#">IA 05-NSH-00310-L_0</a>	Cold Springs Lake	primary contact recreation	algae	Chl-a trophic state index < 65.	5a	2a	New data: lake renovation in 2006 resulted in improved water clarity.
<a href="#">IA 05-NSH-00310-L_0</a>	Cold Springs Lake	primary contact recreation	pH	< 10% of samples violate WQ criteria over two IR cycles.	5a	2a	New data: monitoring data for 2004-2008 period do not show pH impairment.
<a href="#">IA 05-NSH-00310-L_0</a>	Cold Springs Lake	aquatic life	pH	< 10% of samples violate WQ criteria over two IR cycles.	5a	2a	New data: monitoring data for 2004-2008 period do not show pH impairment.
<a href="#">IA 05-PLA-00380-L_0</a>	Wilson Park Lake	primary contact recreation	pH	< 10% of samples violate WQ criteria over two IR cycles.	5a	2a	New data: monitoring data for 2004-2008 period do not show pH impairment.
<a href="#">IA 05-PLA-00380-L_0</a>	Wilson Park Lake	aquatic life	pH	< 10% of samples violate WQ criteria over two IR cycles.	5a	2a	New data: monitoring data for 2004-2008 period do not show pH impairment.
<a href="#">IA 05-PLA-00430-L_0</a>	Windmill Lake	primary contact recreation	pH	< 10% of samples violate WQ criteria over two IR cycles.	5a	2a	New data: monitoring data for 2004-2008 period do not show pH impairment.
<a href="#">IA 05-PLA-00430-L_0</a>	Windmill Lake	aquatic life	pH	< 10% of samples violate WQ criteria over two IR cycles.	5a	2a	New data: monitoring data for 2004-2008 period do not show pH impairment.
<b>Western Iowa River Basins</b>							
<a href="#">IA 06-BOY-0045_0</a>	Elk Creek	aquatic life	biological: fish kill: ammonia	Fish kill in March 2007 caused by animal waste.	5b	4d	Restitution sought & or received for a March 2007 fish kill caused by spill of hog manure

ADB Code	Waterbody Name	Des. Use Impaired during 2008 Cycle:	Cause of 2008 303(d) listing	Rationale for 303(d) listing in 2008 Cycle:	2008 IR Cat.	2010 IR Cat.	De-listing rationale
<a href="#">IA 06-FLO-0070_0</a>	Deep Creek	aquatic life	biological: fish kill: cause unknown	Fish kill in August 2007; caused by runoff from dairy farm.	5b	4d	Restitution sought & or received for August 2007 fish kill caused runoff from dairy feedlot.
<a href="#">IA 06-LSR-0125_0</a>	New Farmer Ditch (AKA Garretson Outlet Ditch)	aquatic life	biological: fish kill: pesticides	Fish kill in August 2007 caused by herbicides applied to control vegetation in the ditch.	5b	4d	Restitution sought & or received for an August 2007 fish kill caused by herbicides used to control aquatic vegetation.
<a href="#">IA 06-LSR-02390-L_0</a>	Lost Island Lake	primary contact recreation	turbidity	aesthetically objectionable conditions: Secchi trophic state index > 65.	5a	4a	TMDL approved by EPA 02/05/2009
<a href="#">IA 06-LSR-0271_0</a>	Stony Creek	aquatic life	biological: fish kill: ammonia and low DO	Fish kill in August 2006 caused by runoff of animal waste.	5b	4d	Restitution sought & or received for an August 2006 fish kill caused by animal waste.
<a href="#">IA 06-LSR-03105-L_0</a>	Silver Lake	primary contact recreation	turbidity	aesthetically objectionable conditions: Secchi trophic state index > 65.	5a	4a	TMDL approved by EPA 09/09/2009
<a href="#">IA 06-WED-00270-L_0</a>	Arrowhead Pond	primary contact recreation	pH	< 10% of samples violate WQ criteria	5a	2a	New data show no pH impairments over the last two IR cycles.
<a href="#">IA 06-WED-00270-L_0</a>	Arrowhead Pond	aquatic life	pH	< 10% of samples violate WQ criteria	5a	2a	New data show no pH impairments over the last two IR cycles.

**Table 2. EPA-approved 2010 Iowa § 303(d) List**

New listing	ADB Code	Water body Name	Des. Use Impaired	Cause of 303(d) listing
<b>Northeastern Iowa River Basins</b>				
N	IA 01-MAQ-0005-L_0	Shrickers Slough	aquatic life	algae
N	IA 01-MAQ-0005-L_0	Shrickers Slough	aquatic life	turbidity
N	IA 01-MAQ-0010_1	Rock Creek	aquatic life	low DO
N	IA 01-MAQ-0030_1	Elk River	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
N	IA 01-MAQ-0060_1	Maquoketa River	aquatic life	biological: unknown impact on freshwater mussels
N	IA 01-MAQ-0060_2	Maquoketa River	aquatic life	biological: unknown impact on freshwater mussels
N	IA 01-MAQ-0060_2	Maquoketa River	primary contact recreation	bacteria
N	IA 01-MAQ-0060_3	Maquoketa River	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
N	IA 01-MAQ-0060_3	Maquoketa River	primary contact recreation	bacteria
Y	IA 01-MAQ-0080_0	Maquoketa River	primary contact recreation	bacteria
N	IA 01-MAQ-0090-L_0	Backbone Lake	primary contact recreation	bacteria
N	IA 01-MAQ-01580-L_0	Central Park Lake	aquatic life	pH
N	IA 01-MAQ-01580-L_0	Central Park Lake	primary contact recreation	algae
N	IA 01-MAQ-01580-L_0	Central Park Lake	primary contact recreation	bacteria
N	IA 01-MAQ-01580-L_0	Central Park Lake	primary contact recreation	pH
N	IA 01-MAQ-0200_0	Silver Creek	aquatic life	biological: unknown impact on freshwater mussels
N	IA 01-MAQ-0210_0	Buck Creek	aquatic life	biological: unknown impact on freshwater mussels
N	IA 01-MAQ-0220_1	Plum Creek	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
N	IA 01-MAQ-0220_1	Plum Creek	aquatic life	biological: unknown impact on freshwater mussels
Y	IA 01-MAQ-0240_0	Coffins Creek	primary contact recreation	bacteria
Y	IA 01-MAQ-0250_0	Honey Creek	primary contact recreation	bacteria
Y	IA 01-NEM-0010_2	Mississippi River	aquatic life	cadmium
N	IA 01-NEM-0010_2	Mississippi River	aquatic life	aluminum
N	IA 01-NEM-0010_2	Mississippi River	drinking water	arsenic

<b>New listing</b>	<b>ADB Code</b>	<b>Water body Name</b>	<b>Des. Use Impaired</b>	<b>Cause of 303(d) listing</b>
N	IA 01-NEM-0010_4	Mississippi River	aquatic life	aluminum
Y	IA 01-NEM-00160-L_0	Lake Of The Hills	primary contact recreation	algae
N	IA 01-NEM-00160-L_0	Lake Of The Hills	primary contact recreation	bacteria
N	IA 01-NEM-0020_1	Mississippi River	human health (fish consumption)	mercury (in fish)
N	IA 01-NEM-0020_2	Mississippi River	human health (fish consumption)	mercury (in fish)
Y	IA 01-NEM-0030_1	Mississippi River	aquatic life	aluminum
Y	IA 01-NEM-0053_0	Mad Creek	primary contact recreation	bacteria
N	IA 01-NEM-0060_1	Duck Creek	primary contact recreation	bacteria
N	IA 01-NEM-0060_2	Duck Creek	primary contact recreation	bacteria
Y	IA 01-NEM-0063_0	Stafford Creek	primary contact recreation	bacteria
Y	IA 01-NEM-0064_0	unnamed creek (aka Pheasant Creek)	primary contact recreation	bacteria
Y	IA 01-NEM-0065_0	Goose Creek	primary contact recreation	bacteria
Y	IA 01-NEM-0066_0	Candlelight Creek	primary contact recreation	bacteria
Y	IA 01-NEM-0067_0	Robin Creek	primary contact recreation	bacteria
Y	IA 01-NEM-0068_1	Silver Creek	primary contact recreation	bacteria
N	IA 01-NMQ-0010_1	North Fork Maquoketa River	primary contact recreation	bacteria
Y	IA 01-NMQ-0020_1	North Fork Maquoketa River	aquatic life	biological: unknown impact on freshwater mussels
N	IA 01-NMQ-0020_1	North Fork Maquoketa River	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
N	IA 01-NMQ-0040_0	Farmers Creek	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
N	IA 01-NMQ-0100_1	Whitewater Creek	aquatic life	biological: unknown impact on freshwater mussels
Y	IA 01-NMQ-0100_1	Whitewater Creek	primary contact recreation	bacteria
Y	IA 01-NMQ-0100_2	Whitewater Creek	aquatic life	biological: fish kill
N	IA 01-NMQ-0110_0	Johns Creek	aquatic life	biological: unknown impact on freshwater mussels
N	IA 01-NMQ-0111_0	Johns Creek	aquatic life	biological: fish kill
N	IA 01-NMQ-0140_0	Bear Creek	aquatic life	biological: fish kill: ammonia
N	IA 01-NMQ-0141_0	Bear Creek	aquatic life	biological: fish kill: ammonia

<b>New listing</b>	<b>ADB Code</b>	<b>Water body Name</b>	<b>Des. Use Impaired</b>	<b>Cause of 303(d) listing</b>
N	IA 01-NMQ-0160_0	Hickory Creek	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
N	IA 01-TRK-0010_1	Pleasant Creek	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
N	IA 01-TRK-0090_1	Tetes Des Morts Creek	aquatic life	biological: fish kill
N	IA 01-TRK-0090_1	Tetes Des Morts Creek	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
Y	IA 01-TRK-01005_2	Unnamed tributary to Catfish Creek	aquatic life	wastewater impacts
N	IA 01-TRK-0180_2	Middle Fork Little Maquoketa River (a.k.a. Bankston Cr.)	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
N	IA 01-TRK-0200_0	Turkey River	primary contact recreation	bacteria
N	IA 01-TRK-0230_3	Little Turkey River	aquatic life	biological: unknown impact on aquatic macro-invertebrates
N	IA 01-TRK-0240_0	Point Hollow Creek (aka White Pine Cr.)	aquatic life	biological: unknown impact on aquatic macro-invertebrates
N	IA 01-TRK-0260_0	Pecks Creek	aquatic life	biological: unknown impact on aquatic macro-invertebrates
N	IA 01-TRK-0360_3	Roberts Creek	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
N	IA 01-TRK-0381_0	Silver Creek	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
N	IA 01-TRK-0381_0	Silver Creek	primary contact recreation	bacteria
N	IA 01-TRK-03817_0	Unnamed Tributary to UT to Silver Creek	aquatic life	ammonia
Y	IA 01-TRK-03817_0	Unnamed Tributary to UT to Silver Creek	primary contact recreation	bacteria
N	IA 01-TRK-0382_0	Silver Creek	primary contact recreation	bacteria
N	IA 01-TRK-0416_0	Nutting Creek	primary contact recreation	bacteria
N	IA 01-TRK-0440_4	Crane Creek	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
N	IA 01-TRK-04515_0	Unnamed Tributary to Bass Creek	aquatic life	biological: fish kill: ammonia and low DO
N	IA 01-UIA-0010_1	Paint Creek	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
N	IA 01-UIA-0090_0	Upper Iowa River	human health (fish consumption)	mercury (in fish)
N	IA 01-UIA-0090_0	Upper Iowa River	primary contact recreation	bacteria
N	IA 01-UIA-0100_0	Upper Iowa River	human health (fish consumption)	mercury (in fish)

<b>New listing</b>	<b>ADB Code</b>	<b>Water body Name</b>	<b>Des. Use Impaired</b>	<b>Cause of 303(d) listing</b>
N	IA 01-UIA-0100_0	Upper Iowa River	primary contact recreation	bacteria
N	IA 01-UIA-0110_1	Upper Iowa River	human health (fish consumption)	mercury (in fish)
N	IA 01-UIA-0110_2	Upper Iowa River	aquatic life	biological: unknown impact on freshwater mussels
N	IA 01-UIA-0110_2	Upper Iowa River	human health (fish consumption)	mercury (in fish)
N	IA 01-UIA-0110_2	Upper Iowa River	primary contact	bacteria
N	IA 01-UIA-0110_3	Upper Iowa River	aquatic life	biological: unknown impact on freshwater mussels
N	IA 01-UIA-0120_1	Upper Iowa River	aquatic life	biological: unknown impact on freshwater mussels
N	IA 01-UIA-0130_0	Irish Hollow Creek	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
N	IA 01-UIA-0140_0	French Creek	primary contact	bacteria
N	IA 01-UIA-0150_0	Clear Creek	primary contact	bacteria
Y	IA 01-UIA-0160_0	Silver Creek	primary contact	bacteria
N	IA 01-UIA-0170_1	Bear Creek	primary contact	bacteria
N	IA 01-UIA-0170_2	Bear Creek	aquatic life	biological: fish kill
N	IA 01-UIA-0180_0	Waterloo Creek	primary contact recreation	bacteria
N	IA 01-UIA-0190_0	North Bear Creek	primary contact recreation	bacteria
N	IA 01-UIA-0230_0	Patterson Creek	primary contact recreation	bacteria
N	IA 01-UIA-0240_1	Canoe Creek	primary contact recreation	bacteria
N	IA 01-UIA-0270_0	Coon Creek	primary contact recreation	bacteria
N	IA 01-UIA-0280_1	Trout Creek	primary contact recreation	bacteria
N	IA 01-UIA-0300_1	Trout Creek (aka Trout Run)	primary contact recreation	bacteria
N	IA 01-UIA-0320_0	Dry Run	primary contact recreation	bacteria
N	IA 01-UIA-0340_0	Ten Mile Creek	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
N	IA 01-UIA-0350_0	Unnamed Creek (aka Casey Spring Cr.)	primary contact recreation	bacteria
N	IA 01-UIA-0370_0	Pine Creek	primary contact recreation	bacteria
N	IA 01-UIA-0380_0	East Pine Creek	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
N	IA 01-UIA-0390_0	Unnamed Creek (aka Cold Water Cr.)	primary contact recreation	bacteria

<b>New listing</b>	<b>ADB Code</b>	<b>Water body Name</b>	<b>Des. Use Impaired</b>	<b>Cause of 303(d) listing</b>
N	IA 01-UIA-0403_0	Silver Creek	primary contact recreation	bacteria
N	IA 01-UIA-0410_0	Nichols Creek (aka Bigalk Cr.)	primary contact recreation	bacteria
N	IA 01-UIA-0420_1	Beaver Creek	primary contact recreation	bacteria
Y	IA 01-UIA-0430_0	Staff Creek	primary contact recreation	bacteria
Y	IA 01-VOL-0010_1	Volga River	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
N	IA 01-VOL-0010_3	Volga River	human health (fish consumption)	mercury (in fish)
N	IA 01-VOL-00130-L_0	Frog Hollow (aka Volga Lake)	aquatic life	pH
N	IA 01-VOL-00130-L_0	Frog Hollow (aka Volga Lake)	primary contact recreation	algae
N	IA 01-VOL-00130-L_0	Frog Hollow (aka Volga Lake)	primary contact recreation	pH
N	IA 01-VOL-0020_1	Volga River	human health (fish consumption)	mercury (in fish)
N	IA 01-VOL-0020_2	Volga River	human health (fish consumption)	mercury (in fish)
N	IA 01-VOL-0120_2	Brush Creek	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
N	IA 01-VOL-0150_1	Little Volga River	human health (fish consumption)	mercury (in fish)
N	IA 01-WPS-0010_1	Wapsipinicon River	primary contact recreation	bacteria
N	IA 01-WPS-0010_2	Wapsipinicon River	primary contact recreation	bacteria
N	IA 01-WPS-0010_4	Wapsipinicon River	primary contact recreation	bacteria
N	IA 01-WPS-0010_5	Wapsipinicon River	aquatic life	biological: unknown impact on freshwater mussels
N	IA 01-WPS-0010_5	Wapsipinicon River	primary contact recreation	bacteria
Y	IA 01-WPS-0020_1	Wapsipinicon River	primary contact recreation	bacteria
N	IA 01-WPS-0020_4	Wapsipinicon River	primary contact recreation	bacteria
N	IA 01-WPS-0020_6	Wapsipinicon River	aquatic life	biological: unknown impact on freshwater mussels
N	IA 01-WPS-0030_1	Wapsipinicon River	aquatic life	biological: unknown impact on (1) freshwater mussels and (2) fish / aquatic macro-invertebrates
N	IA 01-WPS-0030_5	Wapsipinicon River	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
N	IA 01-WPS-0030_5	Wapsipinicon River	aquatic life	biological: fish kill
N	IA 01-WPS-00375-L_0	Lake Hendricks	aquatic life	pH

<b>New listing</b>	<b>ADB Code</b>	<b>Water body Name</b>	<b>Des. Use Impaired</b>	<b>Cause of 303(d) listing</b>
N	IA 01-WPS-00375-L_0	Lake Hendricks	primary contact recreation	algae
N	IA 01-WPS-00375-L_0	Lake Hendricks	primary contact recreation	pH
N	IA 01-WPS-0050_1	Brophy Creek	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
N	IA 01-WPS-0109_0	Walnut Creek	aquatic life	biological: fish kill: ammonia and low DO
N	IA 01-WPS-0110_1	Buffalo Creek	aquatic life	biological: unknown impact on freshwater mussels
N	IA 01-WPS-0110_2	Buffalo Creek	aquatic life	biological: unknown impact on freshwater mussels
N	IA 01-WPS-0110_3	Buffalo Creek	aquatic life	biological: unknown impact on freshwater mussels
N	IA 01-WPS-0130_1	Buffalo Creek	aquatic life	biological: unknown impact on freshwater mussels
N	IA 01-WPS-0130_2	Buffalo Creek	aquatic life	biological: unknown impact on freshwater mussels
Y	IA 01-WPS-0153_0	Unnamed Creek (near Hazleton)	aquatic life	biological: fish kill
Y	IA 01-WPS-0183_0	Unnamed Tributary to Crane Creek	aquatic life	biological: fish kill
Y	IA 01-WPS-0237_0	Unnamed tributary to Lake Hendricks	primary contact recreation	bacteria
N	IA 01-WPS-0270_0	Unnamed Tributary to Buffalo Creek	aquatic life	biological: fish kill
N	IA 01-YEL-0010_2	Miners Creek	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
Y	IA 01-YEL-0020_2	Buck Creek	aquatic life	biological: fish kill
Y	IA 01-YEL-0021_0	Buck Creek	aquatic life	biological: fish kill
Y	IA 01-YEL-0060_0	Bloody Run	primary contact recreation	bacteria
N	IA 01-YEL-0070_0	Yellow River	primary contact recreation	bacteria
N	IA 01-YEL-0080_1	Yellow River	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
N	IA 01-YEL-0080_2	Yellow River	aquatic life	low DO
N	IA 01-YEL-0080_2	Yellow River	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
N	IA 01-YEL-0080_2	Yellow River	primary contact recreation	bacteria
N	IA 01-YEL-0080_2	Yellow River	secondary contact recreation	bacteria
Y	IA 01-YEL-0080_3	Yellow River	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
N	IA 01-YEL-0080_3	Yellow River	primary contact recreation	bacteria

<b>New listing</b>	<b>ADB Code</b>	<b>Water body Name</b>	<b>Des. Use Impaired</b>	<b>Cause of 303(d) listing</b>
N	IA 01-YEL-0090_0	Dousman Creek	aquatic life	low DO
N	IA 01-YEL-0090_0	Dousman Creek	primary contact recreation	bacteria
N	IA 01-YEL-0100_0	Suttle Creek	aquatic life	low DO
N	IA 01-YEL-0100_0	Suttle Creek	primary contact recreation	bacteria
N	IA 01-YEL-0100_0	Suttle Creek	secondary contact recreation	bacteria
N	IA 01-YEL-0110_0	Unnamed Creek (aka Bear Cr.)	aquatic life	low DO
N	IA 01-YEL-0110_0	Unnamed Creek (aka Bear Cr.)	primary contact recreation	bacteria
N	IA 01-YEL-0120_1	Hickory Creek	aquatic life	low DO
N	IA 01-YEL-0120_1	Hickory Creek	primary contact recreation	bacteria
N	IA 01-YEL-0125_0	Williams Creek	primary contact recreation	bacteria
N	IA 01-YEL-0130_0	Norfolk Creek	aquatic life	low DO
N	IA 01-YEL-0130_0	Norfolk Creek	primary contact recreation	bacteria
Y	IA 01-YEL-0150_0	Unnamed Creek	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
N	IA 01-YEL-0150_0	Unnamed Creek	primary contact recreation	bacteria
N	IA 01-YEL-0155_0	Unnamed Creek (aka Hecker Cr.)	aquatic life	biological: fish kill
N	IA 01-YEL-0155_0	Unnamed Creek (aka Hecker Cr.)	primary contact recreation	bacteria
N	IA 01-YEL-0160_0	North Fork Yellow River	aquatic life	low DO
N	IA 01-YEL-0160_0	North Fork Yellow River	primary contact recreation	bacteria
<b>Iowa-Cedar River Basin</b>				
Y	IA 02-CED-0010_0	Cedar River	primary contact recreation	bacteria
N	IA 02-CED-0020_2	Cedar River	aquatic life	biological: unknown impact on freshwater mussels
N	IA 02-CED-00210-L_0	Cedar Bend Lake	human health (fish consumption)	PCBs (in fish)
N	IA 02-CED-0030_3	Cedar River	primary contact recreation	bacteria
N	IA 02-CED-0040_2	Cedar River	primary contact recreation	bacteria
N	IA 02-CED-00460-L_0	Meyer Lake	primary contact recreation	algae
N	IA 02-CED-0060_1	Cedar River	primary contact recreation	bacteria
N	IA 02-CED-0060_2	Cedar River	primary contact recreation	bacteria

<b>New listing</b>	<b>ADB Code</b>	<b>Water body Name</b>	<b>Des. Use Impaired</b>	<b>Cause of 303(d) listing</b>
N	IA 02-CED-0070_0	Cedar River	primary contact recreation	bacteria
N	IA 02-CED-0110_1	Cedar River	primary contact recreation	bacteria
N	IA 02-CED-0110_2	Cedar River	human health (fish consumption)	mercury (in fish)
N	IA 02-CED-0110_3	Cedar River	aquatic life	biological: unknown impact on freshwater mussels
N	IA 02-CED-0110_3	Cedar River	human health (fish consumption)	mercury (in fish)
N	IA 02-CED-01545_0	Unnamed Tributary to West Branch Wapsinoc Creek (aka Hoover Creek)	primary contact recreation	bacteria
N	IA 02-CED-0157_1	Pike Run	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
N	IA 02-CED-0157_2	Pike Run	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
Y	IA 02-CED-0163_0	Unnamed Tributary to Mud Creek	aquatic life	biological: fish kill
N	IA 02-CED-0170_1	Sugar Creek	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
N	IA 02-CED-0210_1	Indian Creek	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
N	IA 02-CED-0210_1	Indian Creek	primary contact recreation	bacteria
N	IA 02-CED-0210_2	Indian Creek	primary contact recreation	bacteria
N	IA 02-CED-0217_0	Dry Creek	primary contact recreation	bacteria
N	IA 02-CED-0218_0	McLoud Run	aquatic life	biological: fish kill
N	IA 02-CED-02250-L_0	Cedar Lake	human health (fish consumption)	PCBs (in fish)
N	IA 02-CED-0234_0	East Branch Blue Creek	aquatic life	biological: fish kill
N	IA 02-CED-0270_1	Lime Creek	aquatic life	biological: unknown impact on freshwater mussels
Y	IA 02-CED-0270_1	Lime Creek	primary contact recreation	bacteria
N	IA 02-CED-0300_0	Wolf Creek	primary contact recreation	bacteria
N	IA 02-CED-03060-L_0	Casey Lake (aka Hickory Hills Lake)	aquatic life	pH
N	IA 02-CED-03060-L_0	Casey Lake (aka Hickory Hills Lake)	primary contact recreation	algae
N	IA 02-CED-03060-L_0	Casey Lake (aka Hickory Hills Lake)	primary contact recreation	pH
N	IA 02-CED-0370_2	Black Hawk Creek	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates

<b>New listing</b>	<b>ADB Code</b>	<b>Water body Name</b>	<b>Des. Use Impaired</b>	<b>Cause of 303(d) listing</b>
N	IA 02-CED-0370_2	Black Hawk Creek	primary contact recreation	bacteria
N	IA 02-CED-0380_0	Black Hawk Creek	primary contact recreation	bacteria
N	IA 02-CED-0383_0	North Black Hawk Creek	primary contact recreation	bacteria
N	IA 02-CED-0385_0	Holland Creek	primary contact recreation	bacteria
N	IA 02-CED-0390_0	Dry Run	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
N	IA 02-CED-0390_0	Dry Run	primary contact recreation	bacteria
Y	IA 02-CED-03905-L_0	South Prairie Lake	aquatic life	pH
N	IA 02-CED-0391_0	Dry Run (South Branch)	primary contact recreation	bacteria
N	IA 02-CED-0392_0	Dry Run (North Branch)	primary contact recreation	bacteria
N	IA 02-CED-0400_0	Beaver Creek	primary contact recreation	bacteria
N	IA 02-CED-0410_2	Beaver Creek	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
N	IA 02-CED-0470_1	Little Cedar River	primary contact recreation	bacteria
N	IA 02-CED-0490_1	Burr Oak Creek	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
N	IA 02-CED-0505_1	Unnamed Creek (aka Drainage Ditch 3)	aquatic life	biological: fish kill
N	IA 02-CED-0510_1	Rock Creek	primary contact recreation	bacteria
Y	IA 02-CED-0520_0	Spring Creek	aquatic life	Low DO
N	IA 02-CED-0520_0	Spring Creek	primary contact recreation	bacteria
N	IA 02-CED-0530_0	Turtle Creek	primary contact recreation	bacteria
N	IA 02-CED-0540_1	Deer Creek	primary contact recreation	bacteria
N	IA 02-CED-0550_0	Otter Creek	primary contact recreation	bacteria
Y	IA 02-ICD-0020_3	Flint Creek	aquatic life	biological: fish kill
Y	IA 02-ICD-0021_0	Flint Creek	aquatic life	biological: fish kill
N	IA 02-ICD-0031_1	Cottonwood Drain	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
N	IA 02-ICM-0010_1	Mississippi River	primary contact recreation	bacteria
Y	IA 02-ICM-0010_2	Mississippi River	aquatic life	cadmium
N	IA 02-ICM-0010_2	Mississippi River	aquatic life	aluminum

<b>New listing</b>	<b>ADB Code</b>	<b>Water body Name</b>	<b>Des. Use Impaired</b>	<b>Cause of 303(d) listing</b>
N	IA 02-ICM-0010_2	Mississippi River	drinking water	arsenic
N	IA 02-ICM-0010_2	Mississippi River	primary contact recreation	bacteria
N	IA 02-IOW-0010_3	Iowa River	primary contact recreation	bacteria
N	IA 02-IOW-0020_1	Iowa River	aquatic life	biological: unknown impact on freshwater mussels
N	IA 02-IOW-0020_1	Iowa River	primary contact recreation	bacteria
N	IA 02-IOW-0030_1	Iowa River	aquatic life	biological: unknown impact on freshwater mussels
Y	IA 02-IOW-0030_1	Iowa River	primary contact recreation	bacteria
N	IA 02-IOW-00390-L_0	Lake Macbride	aquatic life	pH
Y	IA 02-IOW-00390-L_0	Lake Macbride	primary contact recreation	algae
N	IA 02-IOW-00390-L_0	Lake Macbride	primary contact recreation	bacteria
N	IA 02-IOW-00390-L_0	Lake Macbride	primary contact recreation	pH
N	IA 02-IOW-0040-L_0	Coralville Reservoir	primary contact recreation	turbidity
N	IA 02-IOW-0050_1	Iowa River	primary contact recreation	bacteria
N	IA 02-IOW-0060_4	Iowa River	primary contact recreation	bacteria
N	IA 02-IOW-0060_5	Iowa River	primary contact recreation	bacteria
N	IA 02-IOW-00660-L_0	Green Castle Lake	aquatic life	pH
N	IA 02-IOW-00660-L_0	Green Castle Lake	primary contact recreation	pH
N	IA 02-IOW-0070_3	Iowa River	primary contact recreation	bacteria
N	IA 02-IOW-0080_2	Iowa River	primary contact recreation	bacteria
Y	IA 02-IOW-00865_2	Roff Creek	aquatic life	wastewater
N	IA 02-IOW-0093_0	Honey Creek	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
Y	IA 02-IOW-0098_0	Prairie Creek	aquatic life	wastewater
N	IA 02-IOW-0100_1	English River	primary contact recreation	bacteria
N	IA 02-IOW-01150-L_0	Iowa Lake	aquatic life	pH
Y	IA 02-IOW-01150-L_0	Iowa Lake	primary contact recreation	algae
N	IA 02-IOW-01150-L_0	Iowa Lake	primary contact recreation	pH
Y	IA 02-IOW-01485_0	Unnamed tributary to Snyder Creek	aquatic life	wastewater

<b>New listing</b>	<b>ADB Code</b>	<b>Water body Name</b>	<b>Des. Use Impaired</b>	<b>Cause of 303(d) listing</b>
N	IA 02-IOW-0150_1	Old Mans Creek	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
N	IA 02-IOW-0150_2	Old Mans Creek	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
N	IA 02-IOW-0150_2	Old Mans Creek	primary contact recreation	bacteria
Y	IA 02-IOW-0152_0	Picayune Creek	aquatic life	biological: fish kill
Y	IA 02-IOW-01525_0	Unnamed Tributary to Picayune Creek	aquatic life	biological: fish kill
N	IA 02-IOW-0155_1	Ralston Creek	aquatic life	priority organics
N	IA 02-IOW-0155_1	Ralston Creek	general use	priority organics
N	IA 02-IOW-0155_1	Ralston Creek	primary contact recreation	priority organics
N	IA 02-IOW-0162_0	Muddy Creek	aquatic life	sewage sludge; ammonia
N	IA 02-IOW-0162_0	Muddy Creek	general use	sewage sludge; ammonia
N	IA 02-IOW-0162_0	Muddy Creek	primary contact recreation	sewage sludge; ammonia
N	IA 02-IOW-01630-L_0	Kent Park Lake	aquatic life	pH
Y	IA 02-IOW-01630-L_0	Kent Park Lake	primary contact recreation	algae
N	IA 02-IOW-01630-L_0	Kent Park Lake	primary contact recreation	pH
Y	IA 02-IOW-0175_2	Price Creek	primary contact recreation	bacteria
Y	IA 02-IOW-0176_0	Price Creek	primary contact recreation	bacteria
N	IA 02-IOW-0180_2	Bear Creek	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
N	IA 02-IOW-01810-L_0	Hannen Lake	aquatic life	pH
N	IA 02-IOW-01810-L_0	Hannen Lake	primary contact recreation	algae
N	IA 02-IOW-01810-L_0	Hannen Lake	primary contact recreation	pH
N	IA 02-IOW-0185_1	Little Bear Creek	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
N	IA 02-IOW-0187_1	Walnut Creek	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
N	IA 02-IOW-0187_2	Walnut Creek	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
N	IA 02-IOW-02095-L_0	Otter Creek Lake	primary contact recreation	algae
Y	IA 02-IOW-0213_0	Bennett Creek	primary contact recreation	bacteria

<b>New listing</b>	<b>ADB Code</b>	<b>Water body Name</b>	<b>Des. Use Impaired</b>	<b>Cause of 303(d) listing</b>
Y	IA 02-IOW-0215_0	Raven Creek	primary contact recreation	bacteria
N	IA 02-IOW-02611_0	Unnamed tributary to Drainage Ditch 55	aquatic life	biological: fish kill
Y	IA 02-IOW-0270_0	South Fork Iowa River	primary contact recreation	bacteria
Y	IA 02-IOW-0280_3	South Fork Iowa River	primary contact recreation	bacteria
Y	IA 02-IOW-0280_4	South Fork Iowa River	primary contact recreation	bacteria
Y	IA 02-IOW-0280_5	South Fork Iowa River	primary contact recreation	bacteria
Y	IA 02-IOW-0282_0	South Fork Iowa River	primary contact recreation	bacteria
Y	IA 02-IOW-0290_0	Beaver Creek	primary contact recreation	bacteria
Y	IA 02-IOW-0295_0	Beaver Creek	primary contact recreation	bacteria
Y	IA 02-IOW-0297_0	South Beaver Creek	primary contact recreation	bacteria
Y	IA 02-IOW-0300_1	Tipton Creek	primary contact recreation	bacteria
Y	IA 02-IOW-0300_2	Tipton Creek	primary contact recreation	bacteria
N	IA 02-IOW-0330-L_0	Lower Pine Lake	primary contact recreation	bacteria
N	IA 02-IOW-0335-L_0	Upper Pine Lake	primary contact recreation	algae
N	IA 02-IOW-0380_1	East Branch Iowa River	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
N	IA 02-IOW-03830-L_0	Eldred Sherwood Lake	primary contact recreation	algae
N	IA 02-IOW-03830-L_0	Eldred Sherwood Lake	primary contact recreation	bacteria
N	IA 02-IOW-04095-L_0	Crystal Lake	primary contact recreation	bacteria
N	IA 02-SHL-00105-L_0	Avenue Of The Saints Lake	aquatic life	pH
N	IA 02-SHL-00105-L_0	Avenue Of The Saints Lake	aquatic life	turbidity
N	IA 02-SHL-00105-L_0	Avenue Of The Saints Lake	aquatic life	algae
Y	IA 02-SHL-0020_2	Shell Rock River	primary contact recreation	bacteria
N	IA 02-SHL-0021_0	Flood Creek	primary contact recreation	bacteria
N	IA 02-SHL-00235_0	Palmer Creek	aquatic life	biological: fish kill: ammonia and low DO
N	IA 02-WFC-0020_1	West Fork Cedar River	primary contact recreation	bacteria
N	IA 02-WFC-0090-L_0	Beeds Lake	primary contact recreation	algae

<b>New listing</b>	<b>ADB Code</b>	<b>Water body Name</b>	<b>Des. Use Impaired</b>	<b>Cause of 303(d) listing</b>
N	IA 02-WFC-0110_0	Bailey Creek	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
N	IA 02-WIN-0010_1	Winnebago River	primary contact recreation	bacteria
N	IA 02-WIN-0010_2	Winnebago River	primary contact recreation	bacteria
Y	IA 02-WIN-0020_1	Winnebago River	aquatic life	biological: fish kill
N	IA 02-WIN-0020_2	Winnebago River	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
N	IA 02-WIN-00450-L_0	Clear Lake	primary contact recreation	bacteria
N	IA 02-WIN-0050_0	Calmus Creek	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
Y	IA 02-WIN-0081_0	Beaver Creek	aquatic life	Low DO
<b>Skunk River Basin</b>				
Y	IA 03-NSK-0010_1	North Skunk River	aquatic life	chromium
N	IA 03-NSK-0010_1	North Skunk River	primary contact recreation	bacteria
Y	IA 03-NSK-0010_2	North Skunk River	aquatic life	chromium
N	IA 03-NSK-0010_2	North Skunk River	primary contact recreation	bacteria
N	IA 03-NSK-0020_2	North Skunk River	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
N	IA 03-NSK-00250-L_0	Hawthorn Lake	aquatic life	turbidity
Y	IA 03-NSK-00250-L_0	Hawthorn Lake	primary contact recreation	algae
N	IA 03-NSK-00250-L_0	Hawthorn Lake	primary contact recreation	turbidity
N	IA 03-NSK-00340-L_0	Rock Creek Lake	primary contact recreation	bacteria
N	IA 03-NSK-0039_0	Coal Creek	aquatic life	biological, fish kill: ammonia
Y	IA 03-SKM-0010_1	Mississippi River	aquatic life	cadmium
N	IA 03-SKM-0010_1	Mississippi River	aquatic life	aluminum
N	IA 03-SKM-0010_1	Mississippi River	drinking water	arsenic
N	IA 03-SKM-0010_1	Mississippi River	primary contact recreation	bacteria
N	IA 03-SKM-0010_2	Mississippi River	primary contact recreation	bacteria
N	IA 03-SKU-00650-L_0	Geode Lake	aquatic life	pH
N	IA 03-SKU-00650-L_0	Geode Lake	human health (fish consumption)	mercury (in fish)

New listing	ADB Code	Water body Name	Des. Use Impaired	Cause of 303(d) listing
N	IA 03-SKU-00650-L_0	Geode Lake	primary contact recreation	bacteria
N	IA 03-SKU-00650-L_0	Geode Lake	primary contact recreation	pH
Y	IA 03-SKU-0080_3	Big Creek	aquatic life	biological: fish kill
Y	IA 03-SKU-0081_0	South Big Creek	aquatic life	biological: fish kill
Y	IA 03-SKU-00835_1	unnamed tributary to Brush Creek	aquatic life	wastewater
N	IA 03-SKU-0085_0	Saunders Branch	aquatic life	biological: impact of ammonia on fish / aquatic macro-invertebrates
N	IA 03-SKU-0085_0	Saunders Branch	aquatic life	biological: impact of low DO/organic enrichment on fish / aquatic macro-invertebrates
N	IA 03-SKU-0085_0	Saunders Branch	aquatic life	biological: impact of priority organics from coal tar deposits on fish / aquatic macro-invertebrates
N	IA 03-SKU-0090_1	Cedar Creek	primary contact recreation	bacteria
N	IA 03-SKU-00945-L_0	Walton Reservoir	drinking water	atrazine
Y	IA 03-SKU-0126_0	East Fork Crooked Creek	aquatic life	biological: fish kill
N	IA 03-SKU-0130_0	West Fork Crooked Creek	aquatic life	biological: fish kill
N	IA 03-SKU-01450-L_0	Lake Darling	primary contact recreation	bacteria
Y	IA 03-SKU-0174_0	Unnamed Tributary to Indian Creek	aquatic life	biological: fish kill
N	IA 03-SSK-0010_2	South Skunk River	primary contact recreation	bacteria
N	IA 03-SSK-0010_3	South Skunk River	drinking water	nitrate
N	IA 03-SSK-0010_3	South Skunk River	primary contact recreation	bacteria
N	IA 03-SSK-00118-L_0	White Oak Conservation Area Lake	aquatic life	pH
N	IA 03-SSK-00118-L_0	White Oak Conservation Area Lake	primary contact recreation	algae
N	IA 03-SSK-00118-L_0	White Oak Conservation Area Lake	primary contact recreation	pH
N	IA 03-SSK-00120-L_0	Lake Keomah	aquatic life	pH
N	IA 03-SSK-00120-L_0	Lake Keomah	primary contact recreation	algae
N	IA 03-SSK-00120-L_0	Lake Keomah	primary contact recreation	bacteria
N	IA 03-SSK-00120-L_0	Lake Keomah	primary contact recreation	pH
N	IA 03-SSK-0020_1	South Skunk River	primary contact recreation	bacteria

<b>New listing</b>	<b>ADB Code</b>	<b>Water body Name</b>	<b>Des. Use Impaired</b>	<b>Cause of 303(d) listing</b>
N	IA 03-SSK-0030_2	South Skunk River	primary contact recreation	bacteria
N	IA 03-SSK-0030_3	South Skunk River	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
N	IA 03-SSK-0040_0	Indian Creek	primary contact recreation	bacteria
N	IA 03-SSK-00530-L_0	Hickory Grove Lake	primary contact recreation	bacteria
N	IA 03-SSK-0056-L_0	Lake Patoka	aquatic life	biological, fish kill: chlorine
N	IA 03-SSK-0057_0	Ballard Creek	aquatic life	biological: fish kill: ammonia and low DO
N	IA 03-SSK-0058_0	Walnut Creek	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
N	IA 03-SSK-0090_0	Long Dick Creek	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
N	IA 03-SSK-0091_0	Long Dick Creek	aquatic life	biological: fish kill: ammonia and low DO
N	IA 03-SSK-0091_0	Long Dick Creek	primary contact recreation	bacteria
<b>Des Moines River Basin</b>				
Y	IA 04-EDM-0041_0	Lotts Creek	aquatic life	biological: fish kill
N	IA 04-EDM-0090_2	Buffalo Creek	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
N	IA 04-EDM-0090_3	Buffalo Creek	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
N	IA 04-FAB-0010_0	North Fabius River	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
N	IA 04-FOX-0010_1	Fox River	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
N	IA 04-FOX-0010_2	Fox River	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
N	IA 04-LDM-0010_1	Des Moines River	primary contact recreation	bacteria
N	IA 04-LDM-0010_2	Des Moines River	primary contact recreation	bacteria
N	IA 04-LDM-0010_3	Des Moines River	aquatic life	biological: fish kill: unknown
N	IA 04-LDM-0010_4	Des Moines River	aquatic life	biological: fish kill: unknown
N	IA 04-LDM-0020_1	Des Moines River	aquatic life	biological: fish kill: unknown
N	IA 04-LDM-0020_1	Des Moines River	primary contact recreation	bacteria
N	IA 04-LDM-0020_2	Des Moines River	primary contact recreation	bacteria

<b>New listing</b>	<b>ADB Code</b>	<b>Water body Name</b>	<b>Des. Use Impaired</b>	<b>Cause of 303(d) listing</b>
N	IA 04-LDM-00215-L_0	Ottumwa Lagoon	aquatic life	biological: fish kill: petroleum products
Y	IA 04-LDM-0030-L_0	Red Rock Reservoir	primary contact recreation	bacteria
Y	IA 04-LDM-0030-L_0	Red Rock Reservoir	primary contact recreation	turbidity
N	IA 04-LDM-00380-L_0	Roberts Creek Lake	primary contact recreation	turbidity
N	IA 04-LDM-00380-L_0	Roberts Creek Lake	primary contact recreation	algae
Y	IA 04-LDM-00490-L_0	Easter Lake	primary contact recreation	bacteria
N	IA 04-LDM-0090_2	Soap Creek	aquatic life	biological: unknown impact on fish / aquatic macro- invertebrates
N	IA 04-LDM-0130_0	Miller Creek	aquatic life	biological: fish kill: unknown
N	IA 04-LDM-0140_1	Muchakinock Creek	aquatic life	biological: unknown impact on fish / aquatic macro- invertebrates
N	IA 04-LDM-0140_2	Muchakinock Creek	aquatic life	biological: unknown impact on fish / aquatic macro- invertebrates
N	IA 04-LDM-0160_0	Cedar Creek	primary contact recreation	bacteria
N	IA 04-LDM-0170_0	Cedar Creek	aquatic life	biological: unknown impact on fish / aquatic macro- invertebrates
N	IA 04-LDM-0200_0	White Breast Creek	aquatic life	low DO
N	IA 04-LDM-0200_0	White Breast Creek	aquatic life	biological: unknown impact on fish / aquatic macro- invertebrates
N	IA 04-LDM-0200_0	White Breast Creek	primary contact recreation	bacteria
N	IA 04-LDM-0210_2	White Breast Creek	aquatic life	biological: unknown impact on fish / aquatic macro- invertebrates
Y	IA 04-LDM-02296-L_0	Red Haw Lake	human health (fish consumption)	mercury (in fish)
N	IA 04-LDM-02296-L_0	Red Haw Lake	primary contact recreation	bacteria
N	IA 04-LDM-0230_0	South River	primary contact recreation	bacteria
N	IA 04-LDM-02615-L_0	Lake Ahquabi	primary contact recreation	algae
N	IA 04-LDM-02690-L_0	West Lake (Osceola)	aquatic life	low DO
N	IA 04-LDM-0270_0	Middle River	aquatic life	biological: unknown impact on fish / aquatic macro- invertebrates
N	IA 04-LDM-0270_0	Middle River	primary contact recreation	bacteria
Y	IA 04-LDM-02700-L_0	Grade Lake	human health (fish consumption)	mercury (in fish)

<b>New listing</b>	<b>ADB Code</b>	<b>Water body Name</b>	<b>Des. Use Impaired</b>	<b>Cause of 303(d) listing</b>
N	IA 04-LDM-02725-L_0	South Banner Lake	human health (fish consumption)	mercury (in fish)
N	IA 04-LDM-02726-L_0	North Banner Lake	human health (fish consumption)	mercury (in fish)
N	IA 04-LDM-02870-L_0	Meadow Lake	primary contact recreation	algae
N	IA 04-LDM-0300_2	North River	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
N	IA 04-LDM-0300_2	North River	primary contact recreation	bacteria
Y	IA 04-LDM-0350_0	Bear Creek	aquatic life	low DO
N	IA 04-RAC-00475-L_0	Black Hawk Lake	primary contact recreation	algae
N	IA 04-RAC-00475-L_0	Black Hawk Lake	primary contact recreation	turbidity
N	IA 04-RAC-00475-L_0	Black Hawk Lake	primary contact recreation	bacteria
N	IA 04-RAC-0050_2	North Raccoon River	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
Y	IA 04-RAC-00530-L_0	Storm Lake	primary contact recreation	bacteria
N	IA 04-RAC-0123_0	Marrowbone Creek	aquatic life	low DO
N	IA 04-RAC-0123_0	Marrowbone Creek	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
Y	IA 04-RAC-0127_0	Elk Run	aquatic life	biological, fish kill: ammonia
Y	IA 04-RAC-01395-L_0	South Twin Lake	aquatic life	algae
Y	IA 04-RAC-01395-L_0	South Twin Lake	aquatic life	turbidity
Y	IA 04-RAC-01690-L_0	Pickerel Lake	aquatic life	algae
Y	IA 04-RAC-01690-L_0	Pickerel Lake	aquatic life	turbidity
Y	IA 04-RAC-01690-L_0	Pickerel Lake	primary contact recreation	algae
Y	IA 04-RAC-01690-L_0	Pickerel Lake	primary contact recreation	turbidity
N	IA 04-RAC-01695_0	Poor Farm Creek	aquatic life	biological: fish kill: unknown
N	IA 04-RAC-0170_0	South Raccoon River	primary contact recreation	bacteria
Y	IA 04-RAC-01750-L_0	Beaver Lake	aquatic life	pH
Y	IA 04-RAC-01750-L_0	Beaver Lake	primary contact recreation	pH
N	IA 04-RAC-01750-L_0	Beaver Lake	primary contact recreation	algae
N	IA 04-RAC-02401_0	Mosquito Creek	aquatic life	biological: fish kill: ammonia

<b>New listing</b>	<b>ADB Code</b>	<b>Water body Name</b>	<b>Des. Use Impaired</b>	<b>Cause of 303(d) listing</b>
N	IA 04-RAC-0251_0	Brushy Creek	aquatic life	biological: fish kill: ammonia/low DO
N	IA 04-RAC-0253_0	Brushy Creek	aquatic life	biological: fish kill: ammonia/low DO
N	IA 04-UDM-0020-L_0	Saylorville Reservoir	primary contact recreation	bacteria
N	IA 04-UDM-0030_1	Des Moines River	primary contact recreation	bacteria
N	IA 04-UDM-0030_2	Des Moines River	primary contact recreation	bacteria
N	IA 04-UDM-0040_1	Des Moines River	primary contact recreation	bacteria
N	IA 04-UDM-0040_2	Des Moines River	primary contact recreation	bacteria
Y	IA 04-UDM-0060_0	Des Moines River	primary contact recreation	bacteria
N	IA 04-UDM-0070_0	Des Moines River	primary contact recreation	bacteria
N	IA 04-UDM-0110_1	Beaver Creek	primary contact recreation	bacteria
N	IA 04-UDM-0140-L_0	Big Creek Lake	primary contact recreation	bacteria
Y	IA 04-UDM-01650-L_0	Don Williams Lake	primary contact recreation	bacteria
N	IA 04-UDM-0170_0	Skillet Creek	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
N	IA 04-UDM-0180_1	Boone River	primary contact recreation	bacteria
N	IA 04-UDM-01880-L_0	Briggs Woods Lake	aquatic life	biological: fish kill: low DO
Y	IA 04-UDM-01880-L_0	Briggs Woods Lake	primary contact recreation	algae
N	IA 04-UDM-0215_0	Lyons Creek	aquatic life	biological: fish kill: unknown
N	IA 04-UDM-0215_0	Lyons Creek	primary contact recreation	bacteria
N	IA 04-UDM-0247_0	Buttermilk Creek	primary contact recreation	bacteria
N	IA 04-UDM-0253_1	West Otter Creek	aquatic life	biological: fish kill, cause unknown
Y	IA 04-UDM-0266_0	East Branch Boone River	aquatic life	biological: fish kill: pesticides
N	IA 04-UDM-0300_1	Lizard Creek	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
N	IA 04-UDM-0300_1	Lizard Creek	primary contact recreation	bacteria
Y	IA 04-UDM-03110-L_0	Lizard Lake	aquatic life	algae
Y	IA 04-UDM-03110-L_0	Lizard Lake	aquatic life	turbidity
Y	IA 04-UDM-0510-L_0	Fourmile Lake	aquatic life	algae
Y	IA 04-UDM-0510-L_0	Fourmile Lake	aquatic life	turbidity

New listing	ADB Code	Water body Name	Des. Use Impaired	Cause of 303(d) listing
<b>Southern Iowa River Basins</b>				
N	IA 05-CHA-0010_2	Chariton River	primary contact recreation	bacteria
N	IA 05-CHA-0020-L_2	Rathbun Reservoir	aquatic life	turbidity
N	IA 05-CHA-0020-L_2	Rathbun Reservoir	primary contact recreation	turbidity
N	IA 05-CHA-0020-L_2	Rathbun Reservoir	primary contact recreation	algae
N	IA 05-CHA-0020-L_3	Rathbun Reservoir	aquatic life	turbidity
N	IA 05-CHA-0020-L_3	Rathbun Reservoir	primary contact recreation	turbidity
N	IA 05-CHA-0020-L_3	Rathbun Reservoir	primary contact recreation	algae
Y	IA 05-CHA-0020-L_4	Rathbun Reservoir	primary contact recreation	turbidity
N	IA 05-CHA-0030_1	Chariton River	aquatic life	low DO
N	IA 05-CHA-0030_1	Chariton River	primary contact recreation	bacteria
N	IA 05-CHA-0030_2	Chariton River	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
N	IA 05-CHA-00301_0	Chariton River	primary contact recreation	bacteria
N	IA 05-CHA-00302_0	Chariton Creek	primary contact recreation	bacteria
Y	IA 05-CHA-00325-L_0	Centerville Reservoir Upper	human health (fish consumption)	mercury (in fish)
N	IA 05-CHA-0040_0	Cooper Creek	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
N	IA 05-CHA-0056_0	Honey Creek	primary contact recreation	bacteria
N	IA 05-CHA-0057_0	Unnamed Tributary to Rathbun Reservoir	aquatic life	biological: fish kill: petroleum products
N	IA 05-CHA-0060_1	South Fork Chariton River	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
N	IA 05-CHA-0060_1	South Fork Chariton River	primary contact recreation	bacteria
N	IA 05-CHA-0060_2	South Fork Chariton River	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
N	IA 05-CHA-0060_2	South Fork Chariton River	primary contact recreation	bacteria
N	IA 05-CHA-0061_0	Walker Branch	primary contact recreation	bacteria
N	IA 05-CHA-0062_0	Jordan Creek	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
N	IA 05-CHA-0062_0	Jordan Creek	primary contact recreation	bacteria

<b>New listing</b>	<b>ADB Code</b>	<b>Water body Name</b>	<b>Des. Use Impaired</b>	<b>Cause of 303(d) listing</b>
N	IA 05-CHA-0063_0	Jackson Creek	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
N	IA 05-CHA-0063_0	Jackson Creek	primary contact recreation	bacteria
N	IA 05-CHA-0064_0	West Jackson Creek	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
N	IA 05-CHA-0066_0	Ninemile Creek	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
N	IA 05-CHA-0066_0	Ninemile Creek	primary contact recreation	bacteria
N	IA 05-CHA-0067_0	Dick Creek	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
N	IA 05-CHA-0068_0	Honey Creek	primary contact recreation	bacteria
N	IA 05-CHA-00690-L_0	Bob White Lake	primary contact recreation	bacteria
N	IA 05-CHA-00690-L_0	Bob White Lake	primary contact recreation	algae
N	IA 05-CHA-0070_0	Wolf Creek	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
N	IA 05-CHA-0070_0	Wolf Creek	primary contact recreation	bacteria
Y	IA 05-CHA-0077_0	Fivemile Creek	aquatic life	ammonia
N	IA 05-CHA-0077_0	Fivemile Creek	primary contact recreation	bacteria
N	IA 05-GRA-0030_0	East Fork Medicine Creek	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
N	IA 05-GRA-0040_0	Thompson River	primary contact recreation	bacteria
N	IA 05-GRA-0070_0	Weldon River	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
N	IA 05-GRA-0080_0	Little River	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
Y	IA 05-GRA-00810-L_0	Little River Watershed Lake	aquatic life	turbidity
N	IA 05-GRA-00810-L_0	Little River Watershed Lake	primary contact recreation	algae
N	IA 05-GRA-00810-L_0	Little River Watershed Lake	primary contact recreation	turbidity
N	IA 05-GRA-01010-L_0	Nine Eagles Lake	human health (fish consumption)	mercury (in fish)
N	IA 05-GRA-01010-L_0	Nine Eagles Lake	primary contact recreation	bacteria
N	IA 05-GRA-01410-L_0	Thayer Lake	primary contact recreation	turbidity

<b>New listing</b>	<b>ADB Code</b>	<b>Water body Name</b>	<b>Des. Use Impaired</b>	<b>Cause of 303(d) listing</b>
N	IA 05-GRA-01410-L_0	Thayer Lake	primary contact recreation	algae
N	IA 05-GRA-0170_0	Lotts Creek	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
N	IA 05-GRA-0180_0	Middle Fork Grand River	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
N	IA 05-GRA-01920-L_0	Loch Ayr	drinking water	atrazine
N	IA 05-NOD-0020_0	Nodaway River (aka West Nodaway R.)	primary contact recreation	bacteria
N	IA 05-NOD-0030_1	East Nodaway River	primary contact recreation	bacteria
N	IA 05-NOD-0030_2	East Nodaway River	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
N	IA 05-NOD-00485-L_0	Orient Lake	aquatic life	pH
N	IA 05-NOD-00485-L_0	Orient Lake	primary contact recreation	algae
N	IA 05-NOD-00485-L_0	Orient Lake	primary contact recreation	pH
N	IA 05-NOD-0070_0	Middle Nodaway River	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
N	IA 05-NOD-00820-L_0	Mormon Trail Lake	aquatic life	pH
N	IA 05-NOD-00820-L_0	Mormon Trail Lake	human health (fish consumption)	mercury (in fish)
Y	IA 05-NOD-00820-L_0	Mormon Trail Lake	primary contact recreation	bacteria
N	IA 05-NOD-00820-L_0	Mormon Trail Lake	primary contact recreation	pH
N	IA 05-NOD-00930-L_0	Viking Lake	primary contact recreation	algae
N	IA 05-NOD-00930-L_0	Viking Lake	primary contact recreation	bacteria
Y	IA 05-NOD-0115_0	Rose Creek	aquatic life	biological: fish kill: ammonia
N	IA 05-NSH-0020_1	East Nishnabotna River	primary contact recreation	bacteria
N	IA 05-NSH-0020_2	East Nishnabotna River	primary contact recreation	bacteria
N	IA 05-NSH-00310-L_0	Cold Springs Lake	primary contact recreation	turbidity
Y	IA 05-NSH-00580-L_0	Lake Anita	primary contact recreation	bacteria
N	IA 05-NSH-0060_0	Troublesome Creek	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
N	IA 05-NSH-0063_0	Davids Creek	aquatic life	biological: fish kill: ammonia/low DO
N	IA 05-NSH-0080_1	West Nishnabotna River	primary contact recreation	bacteria

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N	IA 05-NSH-0090_3	West Nishnabotna River	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
N	IA 05-NSH-0090_4	West Nishnabotna River	aquatic life	biological: fish kill: ammonia/low DO
N	IA 05-NSH-0120_0	Silver Creek	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
N	IA 05-NSH-0128_0	Mud Creek	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
N	IA 05-NSH-0133_0	Jordan Creek	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
N	IA 05-NSH-01440-L_0	Prairie Rose Lake	aquatic life	pH
N	IA 05-NSH-01440-L_0	Prairie Rose Lake	primary contact recreation	algae
N	IA 05-NSH-01440-L_0	Prairie Rose Lake	primary contact recreation	turbidity
N	IA 05-NSH-01440-L_0	Prairie Rose Lake	primary contact recreation	pH
N	IA 05-PLA-0015-L_0	Sands Timber Lake (aka Blockton Reservoir)	aquatic life	turbidity
N	IA 05-PLA-0020_0	Platte River	aquatic life	biological: fish kill: unknown toxicity
N	IA 05-PLA-0021_0	Platte River	aquatic life	biological: fish kill: unknown toxicity
N	IA 05-PLA-00295-L_0	Green Valley Lake	primary contact recreation	algae
N	IA 05-PLA-00335-L_0	Lake Of Three Fires	primary contact recreation	bacteria
N	IA 05-PLA-00380-L_0	Wilson Park Lake	primary contact recreation	algae
N	IA 05-PLA-0040_1	West Branch One Hundred And Two River	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
N	IA 05-PLA-00430-L_0	Windmill Lake	primary contact recreation	algae
N	IA 05-PLA-00430-L_0	Windmill Lake	primary contact recreation	turbidity
N	IA 05-TAR-0020_0	West Tarkio Creek	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
<b>Western Iowa River Basins</b>				
N	IA 06-BOY-0020_1	Boyer River	primary contact recreation	bacteria
N	IA 06-BOY-00405-L_0	Willow Lake	primary contact recreation	bacteria
N	IA 06-BSR-0010_3	Big Sioux River	aquatic life	biological: fish kill: unknown toxicity
N	IA 06-BSR-0021_0	Perry Creek	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates

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N	IA 06-BSR-0023_0	Broken Kettle Creek	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
N	IA 06-BSR-0027_0	Indian Creek	primary contact recreation	bacteria
N	IA 06-BSR-00280-L_0	Lake Pahoja	primary contact recreation	algae
N	IA 06-BSR-00280-L_0	Lake Pahoja	primary contact recreation	bacteria
N	IA 06-BSR-0029_0	Sixmile Creek	aquatic life	biological
N	IA 06-BSR-0029_0	Sixmile Creek	primary contact recreation	bacteria
N	IA 06-BSR-0030_0	Rock River	aquatic life	biological: fish kill: ammonia/low DO
N	IA 06-BSR-0030_0	Rock River	primary contact recreation	bacteria
N	IA 06-BSR-0035_0	Dry Creek	aquatic life	biological: fish kill: low DO
N	IA 06-BSR-0035_0	Dry Creek	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
N	IA 06-BSR-0040_1	Rock River	primary contact recreation	bacteria
N	IA 06-BSR-0040_2	Rock River	primary contact recreation	bacteria
N	IA 06-BSR-0060_1	Little Rock River	primary contact recreation	bacteria
N	IA 06-BSR-0060_3	Little Rock River	primary contact recreation	bacteria
N	IA 06-BSR-0065_0	Unnamed Tributary to Little Rock River	aquatic life	biological: fish kill: ammonia
N	IA 06-BSR-0070_3	Otter Creek	aquatic life	biological: fish kill: low DO
N	IA 06-BSR-0072_0	Otter Creek	aquatic life	biological: fish kill: ammonia
N	IA 06-BSR-0080_0	Mud Creek	aquatic life	biological: fish kill: low DO
N	IA 06-BSR-0080_0	Mud Creek	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
N	IA 06-BSR-0080_0	Mud Creek	primary contact recreation	bacteria
Y	IA 06-BSR-0081_0	Unnamed Tributary to Mud Creek	aquatic life	biological: fish kill, ammonia
N	IA 06-FLO-0010_0	Floyd River	primary contact recreation	bacteria
N	IA 06-FLO-0020_1	Floyd River	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
N	IA 06-FLO-0020_2	Floyd River	aquatic life	biological: fish kills attributed to ammonia and organic enrichment/low DO
N	IA 06-FLO-0020_2	Floyd River	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates

<b>New listing</b>	<b>ADB Code</b>	<b>Water body Name</b>	<b>Des. Use Impaired</b>	<b>Cause of 303(d) listing</b>
Y	IA 06-FLO-0021_0	Floyd River	aquatic life	biological: fish kill
N	IA 06-FLO-0040_0	West Branch Floyd River	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
N	IA 06-FLO-0065_0	Willow Creek	aquatic life	biological: fish kill: ammonia/low DO
N	IA 06-FLO-0070_0	Deep Creek	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
N	IA 06-LSR-0020_1	Little Sioux River	primary contact recreation	bacteria
N	IA 06-LSR-00250-L_0	Little Sioux Park Lake	aquatic life	pH
N	IA 06-LSR-00250-L_0	Little Sioux Park Lake	primary contact recreation	pH
N	IA 06-LSR-0030_1	Little Sioux River	primary contact recreation	bacteria
N	IA 06-LSR-0030_4	Little Sioux River	primary contact recreation	bacteria
N	IA 06-LSR-0040_1	Little Sioux River	primary contact recreation	bacteria
N	IA 06-LSR-0040_2	Little Sioux River	primary contact recreation	bacteria
N	IA 06-LSR-0040_3	Little Sioux River	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
N	IA 06-LSR-0070_1	Maple River	primary contact recreation	bacteria
N	IA 06-LSR-00790-L_0	Crawford Creek Impoundment	primary contact recreation	algae
N	IA 06-LSR-00805-L_0	Moorehead Park Pond	aquatic life	pH
N	IA 06-LSR-0101_0	Odebolt Creek	aquatic life	biological: fish kill: ammonia
N	IA 06-LSR-0120_1	West Fork Little Sioux River	primary contact recreation	bacteria
N	IA 06-LSR-0120_2	West Fork Little Sioux River	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
N	IA 06-LSR-0131_0	West Fork Little Sioux River	aquatic life	biological: fish kill: cause unknown
N	IA 06-LSR-0143_0	Johns Creek	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
Y	IA 06-LSR-01495_0	Ashton Creek	aquatic life	Low DO
N	IA 06-LSR-0150_0	Willow Creek	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
N	IA 06-LSR-0170_0	Mill Creek	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
N	IA 06-LSR-0223_0	Willow Creek	aquatic life	biological; fish kill

<b>New listing</b>	<b>ADB Code</b>	<b>Water body Name</b>	<b>Des. Use Impaired</b>	<b>Cause of 303(d) listing</b>
N	IA 06-LSR-0223_0	Willow Creek	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
N	IA 06-LSR-0224_0	Willow Creek	aquatic life	biological: fish kill: ammonia/low DO
Y	IA 06-LSR-02330-L_0	Virgin Lake	aquatic life	algae
Y	IA 06-LSR-02330-L_0	Virgin Lake	aquatic life	turbidity
Y	IA 06-LSR-02420-L_0	Dan Greene Slough	aquatic life	algae
Y	IA 06-LSR-02420-L_0	Dan Greene Slough	aquatic life	turbidity
N	IA 06-LSR-0250_0	Ocheyedan River	primary contact recreation	bacteria
N	IA 06-LSR-0270_0	Stony Creek	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
N	IA 06-LSR-02840-L_2	West Okoboji Lake	primary contact recreation	bacteria
N	IA 06-LSR-02850-L_0	Big Spirit Lake	primary contact recreation	bacteria
N	IA 06-LSR-02890-L_0	Center Lake	aquatic life	pH
N	IA 06-LSR-02890-L_0	Center Lake	primary contact recreation	pH
N	IA 06-LSR-0305_0	Milford Creek	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
N	IA 06-SOL-0010_1	Soldier River	primary contact recreation	bacteria
N	IA 06-WED-0003_2	Plum Creek	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
N	IA 06-WED-0010_1	Keg Creek	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
N	IA 06-WED-0010_2	Keg Creek	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
N	IA 06-WED-0020_1	Mosquito Creek	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
N	IA 06-WED-0020_2	Mosquito Creek	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
N	IA 06-WED-0020_3	Mosquito Creek	aquatic life	biological: unknown impact on fish / aquatic macro-invertebrates
N	IA 06-WED-00270-L_0	Arrowhead Pond	aquatic life	biological: fish kills attributed to organic enrichment/low DO
N	IA 06-WED-00270-L_0	Arrowhead Pond	primary contact recreation	algae
N	IA 06-WEM-0020_2	Missouri River	drinking water	arsenic

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N	IA 06-WEM-00235-L_0	Lake Manawa	primary contact recreation	algae
N	IA 06-WEM-00235-L_0	Lake Manawa	primary contact recreation	turbidity
N	IA 06-WEM-00265-L_0	Carter Lake	aquatic life	low DO
N	IA 06-WEM-00265-L_0	Carter Lake	human health (fish consumption)	PCBs (in fish)
N	IA 06-WEM-00340-L_0	Desoto Bend	primary contact recreation	turbidity
N	IA 06-WEM-00340-L_0	Desoto Bend	primary contact recreation	algae
Y	IA 06-WEM-00485-L_0	Browns Lake	primary contact recreation	bacteria
N	IA 06-WEM-00485-L_0	Browns Lake	primary contact recreation	turbidity