

**PUBLIC PARTICIPATION RESPONSIVENESS SUMMARY
FOR IOWA'S 2012
SECTION 303(d) LIST OF IMPAIRED WATERS**

**IOWA DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL SERVICES DIVISION
GEOLOGICAL & WATER SURVEY
WATERSHED MONITORING & ASSESSMENT SECTION**

March 25, 2013

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INTRODUCTION:

The following constitutes a summary of the comments received in response to the draft 2012 Section 303(d) list of impaired waters as developed by the Iowa Department of Natural Resources (IDNR). Notice of availability of the draft 2012 list was published on January 15, 2013, in the *Des Moines Register* (Appendix 1). In addition, notice of the availability of the list was sent to interest groups and a network of statewide news organizations in the January 10, 2013 edition of IDNR’s “EcoNews Wire”

(<http://www.iowadnr.gov/insidednr/socialmediapressroom/newsreleases/vw/1/ite/mid/1165>). Additional materials for the draft 2012 list were available at the Iowa DNR’s “impaired waters” web site

(<http://www.iowadnr.gov/Environment/WaterQuality/WaterMonitoring/ImpairedWaters.aspx>). Public comments were accepted from January 15 through February 28, 2013.

Persons and agencies providing comments on Iowa’s draft 2012 Section 303(d) list are summarized in Appendix 2. Other than ongoing e-mail correspondence between Iowa DNR and U.S. EPA Region 7, only one set of comments was received: the Iowa Environmental Council (IEC) submitted comments on February 28, 2013 (Appendix 3). Changes to the draft list were also made as a result of ongoing reviews and comments from U.S. EPA Region 7 and by Iowa DNR staff. This responsiveness summary provides a discussion of the issues raised by IEC’s comments and how their comments were incorporated into the development of IDNR’s final 2012 list. This responsiveness summary also documents how comments resulting from ongoing reviews by U.S. EPA and Iowa DNR staff resulted in changes to Iowa’s 2012 draft list.

Changes made to final 2012 impaired waters list:

As distributed for public comment, IDNR's draft 2012 Section 303(d) list included 483 waterbodies with a total of 656 impairments. For the final list, five waterbodies were added by IDNR staff that were inadvertently omitted from the draft list (Table 1). Eight waterbodies were removed from the draft list due to TMDL approvals and legal action against persons causing fish kills (Table 2). A total of 21 impairments of the 656 impairments on the draft list was removed from the draft list. Seventeen of these impairments were removed due to U.S. EPA approval of TMDLs; the remainder were removed due to legal actions related to fish kills (Table 3). Given these changes, IDNR's final 2012 list of impaired waters (Integrated Report Category 5) includes a total of 480 waterbodies with a total of 642 impairments.

Table 1. Impairments not on Iowa's January 15, 2013 draft Section 303(d) list that were <u>added</u> to Iowa's final (March 25, 2013) list. All but waterbody IA 02-SHL-0010_2 are new additions to the 2012 list.				
ADB Code	Waterbody Name	Location Description	Impaired Use	Listing Rationale
IA 01-NMQ-0080_0	Prairie Creek	mouth (S24 T87N R1E Dubuque Co.) to confluence with unnamed tributary in SE 1/4 S22 T87N R1E Dubuque Co.	Aquatic Life	Fish kill in 2010; caused by animal waste.
IA 01-NMQ-0083_0	Unnamed Tributary to Prairie Creek	mouth (S24 T87N R1E Dubuque Co.) to confluence with unnamed tributary in SE 1/4 S22 T87N R1E Dubuque Co.	Aquatic Life	Fish kill in 2010; caused by animal waste.
IA 02-SHL-0010_1	Shell Rock River	from mouth (S4 T90N R14W Black Hawk Co.) to the south corporate limit of the city of Shell Rock in S12 T91N R15W Butler Co.	Fish Consumption	Fish consumption advisory for mercury issued in 2013.
IA 02-SHL-0010_2	Shell Rock River	from south corporate limit of Shell Rock (S12 T91N R15W Butler Co.) to confluence with Flood Cr. in S27 T93N R16W Butler Co.	Fish Consumption	Fish consumption advisory for mercury issued in 2013
IA 02-SHL-0010_3	Shell Rock River	from confluence with Flood Cr. (S27 T93N R16W Butler Co.) to confluence with Winnebago R. in S14 T96N R18W Floyd Co.	Fish Consumption	Fish consumption advisory for mercury issued in 2013.
IA 06-BOY-00510-L_0	Yellow Smoke Park Lake	Crawford County S6T83NR38W 2 mi NE of Denison.	Fish Consumption	Fish consumption advisory for mercury issued in 2013.

Table 2. Waterbodies that were <u>removed</u> from Iowa's January 15, 2013 draft 303(d) list for Iowa's final (March 25, 2013) list.				
ADB Code	Waterbody Name	Location Description	Impaired Use	De-listing Rationale
IA 01-YEL-0070_0	Yellow River	mouth (S34 T96N R3W Allamakee Co.) to County Road X-26 bridge in S24 T96N R5W Allamakee Co.	Primary Contact	EPA approval of bacteria TMDLa
IA 01-YEL-0125_0	Williams Creek	mouth (S9 T96N R5W Allamakee Co.) to confluence with unnamed tributary in S17 T96N R5W Allamakee Co.	Primary Contact	EPA approval of bacteria TMDLa
IA 02-ICD-0020_3	Flint Creek	from unnamed tributary (aka Big Hollow Cr.) (S25 T71N R4W Des Moines Co.) to confluence with unnamed tributary in S21 T71N R4W Des Moines Co.	Aquatic Life	Action brought against person(s) causing kill
IA 02-ICD-0021_0	Flint Creek	from confluence with unnamed tributary (T71N R04W Sec21 Des Moines Co.) to headwaters (T71N R05W Sec23 NW Henry Co.)	Aquatic Life	Action brought against person(s) causing kill
IA 03-SKU-0080_3	Big Creek	from confluence with Brandywine Cr. (S29 T72N R6W Henry Co.) to Lawrence Cr. in S5 T71N R5W Henry Co. (Note: Segment boundary changed in 2004 to match 2002 WQ Standards.)	Aquatic Life	Action brought against person(s) causing kill
IA 03-SKU-0081_0	South Big Creek	from confluence with Lawrence Creek (T71N R5W Sec5) to headwaters (T72N R4W Sec20)	Aquatic Life	Action brought against person(s) causing kill
IA 06-BSR-0020_1	Big Sioux River	from confluence with Rock R. (S1 T95N R48W Sioux Co.) to confluence with Beaver Cr near Canton SD in S36 T98N R49W Lyon Co.	Primary Contact	EPA approval of bacteria TMDLa
IA 06-BSR-0020_3	Big Sioux River	from confluence with Ninemile Cr. (S25 T100N R49W Lyon Co.) to the Iowa / Minnesota state line at N line of S4 T100N R49W Lyon Co.	Primary Contact	EPA approval of bacteria TMDLa

Table 3. Impairments removed from Iowa's draft 2012 Section 303(d) list due to TMDL approval by U.S. EPA. The 17 impairments with approved TMDLs were moved to Category 4a of Iowa's final 2012 Integrated Report.

ADB Code	Waterbody Name	Water-body Type	Impaired Use	Reason for Removal
IA 01-YEL-0070_0	Yellow River	River	Primary Contact	TMDL approved, 2013
IA 01-YEL-0080_2	Yellow River	River	Primary Contact	TMDL approved, 2013
IA 01-YEL-0080_2	Yellow River	River	Secondary Contact	TMDL approved, 2013
IA 01-YEL-0080_3	Yellow River	River	Primary Contact	TMDL approved, 2013
IA 01-YEL-0090_0	Dousman Creek	River	Primary Contact	TMDL approved, 2013
IA 01-YEL-0100_0	Suttle Creek	River	Secondary Contact	TMDL approved, 2013
IA 01-YEL-0100_0	Suttle Creek	River	Primary Contact	TMDL approved, 2013
IA 01-YEL-0110_0	Unnamed Creek (aka Bear Cr.)	River	Primary Contact	TMDL approved, 2013
IA 01-YEL-0110_0	Unnamed Creek (aka Bear Cr.)	River	Secondary Contact	TMDL approved, 2013
IA 01-YEL-0120_1	Hickory Creek	River	Primary Contact	TMDL approved, 2013
IA 01-YEL-0125_0	Williams Creek	River	Primary Contact	TMDL approved, 2013
IA 01-YEL-0130_0	Norfolk Creek	River	Primary Contact	TMDL approved, 2013
IA 01-YEL-0150_0	Unnamed Creek (aka Ludlow Creek)	River	Primary Contact	TMDL approved, 2013
IA 01-YEL-0155_0	Unnamed Creek (aka Hecker Cr.)	River	Primary Contact	TMDL approved, 2013
IA 01-YEL-0160_0	North Fork Yellow River	River	Primary Contact	TMDL approved, 2013
IA 06-BSR-0020_1	Big Sioux River	River	Primary Contact	TMDL approved, 2008
IA 06-BSR-0020_3	Big Sioux River	River	Primary Contact	TMDL approved, 2008

RESPONSES TO COMMENTS RECEIVED:

COMMENTER 1: Iowa Environmental Council:

TMDL priorities:

IEC comment on TMDL priorities for the South Skunk River and Middle River: IEC suggests that the TMDL priorities for both the impairment of drinking water uses on the South Skunk River at Oskaloosa (IA 03-SSK-0010_3) and for the impairment of the aquatic life uses on the Middle River near Indianola (IA 04-LDM-0270_0) should be changed from “low” to “high”. The basis for this request is IEC’s statement that discharges of nutrients from major wastewater treatment facilities likely contribute to both of these impairments. IEC states that creating TMDLs for these segments “is a logical first step that is entirely in sync with, and indeed a necessary component of, the state’s overarching nutrient reduction strategy.” IEC feels that a high TMDL priority and creation of TMDLs for these segments “would demonstrate that DNR is serious about achieving the point source reductions called for in the strategy.”

IDNR Response:

General comments: While IEC’s comments may be accurate in that point source discharges may contribute to existing water quality impairments, there appears to be some misunderstanding on the part of IEC regarding the intent of Iowa’s nutrient reduction strategy relative to point source discharges. In terms of point sources, the foundation of Iowa’s nutrient reduction strategy is a technology-based approach that can be implemented while the details are developed for a water quality-based approach to nutrient reduction (e.g., numeric nutrient criteria). The current nutrient reduction strategy attempts to achieve nutrient reductions through a technology-based approach and not through the water quality-based approach implicit in TMDLs. Thus, the TMDL development suggested by IEC is not consistent with Iowa’s technology-based nutrient reduction strategy. In addition, while having water quality-based permit limits for dischargers is a necessary step for implementing a pollutant trading program, such a program will require rule making and creation of operational structures that may take years to develop. The intent of the nutrient reduction strategy is to achieve meaningful, near-term nutrient reductions from point sources through a technology-based approach.

Specific comments:

South Skunk River in Mahaska County (IA 03-SSK-0010_3): This river segment extends approximately 14 miles from the Highway 63 bridge north of Oskaloosa (S25, T76N, R16W, Mahaska County) upriver to the confluence with Elk Cr. in NE 1/4, S19, T77N, R17W, Mahaska County. IEC is correct

(1) that the drinking water uses of this river segment are impaired due to high levels of nitrate and (2) that the city of Oskaloosa discharges treated wastewater to the South Skunk River. The alluvial well intake area for Oskaloosa's municipal water supply is north of Oskaloosa near the Highway 63 bridge. The Oskaloosa wastewater treatment facility discharges to Spring Creek which enters the South Skunk River approximately four miles downriver from the Highway 63 bridge. Thus, Oskaloosa's water supply intake area is several miles upriver from the point at which treated wastewater reaches the South Skunk River. Thus, the presumption that a TMDL for this nitrate impairment would have relevance to wastewater discharges from the city of Oskaloosa is in error. A TMDL for this nitrate impairment would, however, have relevance for major wastewater dischargers to the South Skunk River upriver from the Oskaloosa drinking water intake.

Regardless, IDNR agrees that the nitrate impairment for this segment of the South Skunk River is related to human health concerns and thus, according to Iowa DNR's listing methodology for impaired waters, is appropriate for a "high priority" for TMDL development. The TMDL priority for this impairment will be changed from "low" to "high" for the 2012 listing cycle.

Middle River in Warren County (IA 04-LDM-0270_0): This river segment extends 26.2 miles from the mouth of the Middle River to the confluence with Clanton Creek near Martensdale in Warren County. The Class B(WW1) aquatic life uses of this assessment segment were assessed as impaired in 2004 based on results of Iowa DNR biological (fish and macroinvertebrate) monitoring conducted in 2002. The biological monitoring site is located approximately 5.5 miles downstream from the Indianola wastewater treatment plant. Potential causes of this impairment were identified as (1) habitat alterations and (2) organic enrichment/low dissolved oxygen. "Habitat alterations" was identified as the most significant cause of impairment (high magnitude) with the relative contribution of organic enrichment/low dissolved oxygen identified as "moderate". The sources of the organic enrichment/low dissolved oxygen impairment were identified as "habitat alterations" and "unknown".

Based on consultation with Iowa DNR staff that conducted the 2002 biological monitoring, Iowa DNR believes that the primary cause of the biological impairment identified for this segment is habitat alteration with wastewater discharges playing a minor and possibly inconsequential role in the impairment. That is, physical alterations to the stream channel (channelization) and other hydrological modifications in the Middle River watershed have resulted in a wide and shallow stream channel in the lower segments of the Middle River that is susceptible to excessive solar heating and to slow/stagnant flow. Both these conditions can exacerbate nutrient-related water quality problems in streams such as algal growth and organic enrichment. Despite the 2004 assessment that suggested a water quality

impact due to organic enrichment/low dissolved oxygen, results of IDNR monthly ambient monitoring from 2000-2012 on the Middle River at the site of the 2002 biological assessment show only one violation of Iowa's dissolved oxygen criterion (5.0 mg/l) in the 153 samples analyzed. The single violation (4.8 mg/l) occurred in December 2000.

Based on the above information, and based on the lack of a clear connection between the existing biological impairment and municipal wastewater discharges, Iowa DNR feels that the currently-identified priority for TMDL development for this segment ("low priority") is appropriate. Please see the Iowa DNR's water quality assessment database, ADBNet, for more information on this assessment:

<https://programs.iowadnr.gov/adbnet/assessment.aspx?aid=4806>.

COMMENTS: U.S. Environmental Protection Agency, Region 7

EPA e-mails of February 25, 2013 regarding de-listings due to preparation and approval of TMDLs.

During the public comment period for Iowa's 2012 list of impaired waters, Iowa DNR consulted with U.S. EPA Region 7 on listing issues. See Appendix 3 for copies of this e-mail correspondence. As a result of this consultation, U.S. EPA Region 7 notified Iowa DNR of 17 impairments on Iowa's draft 2012 list for which TMDLs had been prepared by Iowa DNR and/or U.S. EPA and had been approved by U.S. EPA (Table 3). Thus, these 17 impairments were removed from Iowa's draft 2012 list and placed in Category 4a (impaired but TMDL not required) of Iowa's 2012 Integrated Report. The 15 impaired stream segments in the Yellow River basin (IA 01-YEL) are now covered by a recently (February 2013) approved TMDL. The two impaired segments of the Big Sioux River (IA 06-BSR) are covered by a TMDL for bacteria impairments approved in 2008.

Appendix 1. Copy of public notice for Iowa's draft 2012 Section 303(d) list as published in the January 15, 2013, edition of *The Des Moines Register*.

January 15, 2013

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**The Des Moines
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The Des Moines Register

**R225 Public Notice:
Availability of proposed list under
Clean Water Act Section 303(d)
Agency: Iowa Department of
Natural Resources**

This notice announces the availability of the draft 2012 list of waters for the state of Iowa pursuant to Clean Water Act Section 303(d). Section 303(d) requires that each state identify those waters for which existing, required pollution controls are not stringent enough to implement state water quality standards. For those waters, states are required to establish total maximum daily loads (TMDLs) according to priority ranking. Copies of the list and supporting documentation can be obtained by writing the Iowa Department of Natural Resources, Watershed Monitoring and Assessment Section, Attn: John Olson, 502 East 9th Street, Des Moines, IA 50319. The list and supporting documentation are also available at the DNR's web site at <http://www.iowadnr.gov/Environment/WaterQuality/WaterMonitoring/ImpairedWaters.aspx>. Comments on this list and supporting documentation should be sent to the above address on or before February 28, 2013. Consistent with EPA regulations, Iowa DNR will then submit the list to the U.S. Environmental Protection Agency for approval.

Appendix 2. Persons and agencies providing comments on IDNR's draft 2012 Section 303(d) list of impaired waters:

Commenter	Affiliation / Location	Issue / Comment:
Ralph Rosenberg	Executive Director, Iowa Environmental Council	The priorities identified for two existing impairments potentially related to municipal wastewater discharges should be changed from "low" to "high" to support Iowa's nutrient reduction strategy.
Bruce Perkins	U.S. Environmental Protection Agency, Region 7, Kansas City, KS	Several impairments identified on Iowa's draft 2012 303(d) list are covered by EPA-approved TMDLs and thus should be removed from the list.

Appendix 3. Comments received during the public comment period on IDNR's draft 2012 Section 303(d) list of impaired waters:

Comments received on Iowa's Draft 2012 Section 303(d) list:
Iowa Environmental Council (Ralph Rosenberg), letter of February 28, 2013
U.S. EPA Region 7 (Bruce Perkins), e-mails of February 25, 2013

February 28, 2013, comment letter from the Iowa Environmental Council:



521 East Locust Street, Suite 220
Des Moines, Iowa 50309-1939
515.244.1194 phone
515.244.7856 fax
iecmail@iaenvironment.org
www.iaenvironment.org

February 28, 2013

John Olson
Watershed Monitoring & Assessment Section
Iowa Department of Natural Resources
502 East 9th Street
Des Moines, IA 50309

Dear Mr. Olson,

I am writing on behalf of the Iowa Environmental Council, an alliance of over 60 environmental and conservation organizations in Iowa, to submit comments on the Draft 2012 Impaired Waters List. Our comments concern the TMDL priority rankings of certain river segments which are impaired by nutrient pollution. Specifically, we believe the TMDL priority rankings for the South Skunk River in Mahaska County and the Middle River in Warren County should be changed from low priority to high priority.

The South Skunk River in Mahaska County (IA 03-SSK-0010 3) was added to the impaired waters list in 2004 for exceeding the drinking water standard for nitrate. The City of Oskaloosa sewage treatment plant discharges to the South Skunk and is likely contributing to the nitrate impairment. In Warren County (IA 04-LDM-0270 0), the Middle River was added to the impaired waters list in 2004 due to biological stressors including low dissolved oxygen and organic enrichment. The City of Indianola sewage treatment plant discharges to Cavitt Creek, which empties to the Middle River. This discharge from the sewage treatment plant is likely contributing to the biological impairment in the river.

Nutrient reduction in rivers and lakes is a priority for the state of Iowa and for the EPA. Iowa spent two years developing a Nutrient Reduction Strategy. The strategy calls for significant upgrades at major municipal facilities like the two sewage treatment plants mentioned above. The strategy also calls for the creation of an environmental credit trading program between point and non-point sources in watersheds where it is more economical to address nutrient impairments through non-point source efforts. Credit trading is an innovative idea and may prove useful in Iowa's nutrient reduction efforts. In order for a credit trading program to work, however, there must be a limit placed on the total amount of nutrients that can be added to the water body. The creation of TMDLs for the two river segments mentioned above would lay an excellent foundation for the creation of a credit trading program in Iowa. In each of these two segments we have a known nutrient impairment and a major point source which is likely contributing to that impairment. Creating a TMDL for these segments is a logical first step that is entirely in sync with, and indeed a necessary component of, the state's overarching nutrient reduction strategy.

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The people of Iowa care about this issue. IDALS and DNR received over 1,700 comments on the state's plan to reduce nutrient pollution. Prioritizing the creation of TMDLs for the Middle River and the South Skunk River would demonstrate that DNR is serious about achieving the point source reductions called for in the strategy. The Iowa Environmental Council urges you to do so.

Sincerely,



Ralph Rosenberg
Executive Director
Iowa Environmental Council

February 25, 2013 e-mail from Bruce Perkins, U.S. EPA Region 7, regarding impairments on Iowa's draft Section 303(d) list that are covered by U.S. EPA-approved TMDLs.

From: [Perkins, Bruce](#)
To: [Olson, John \[DNR\]](#)
Subject: 2012 303(d) list
Date: Monday, February 25, 2013 8:01:01 AM

John,

As I was double checking the list the two Big Sioux River segments caught my attention. I checked and they are both covered for bacteria in the TMDL approved in January 2008. It caught my attention because I worked on getting that TMDL approved for those segments both in South Dakota (EPA Region 8) and Iowa. It was called the Lower Big Sioux TMDL but the segments are included.

Bruce

Bruce Perkins
Regional Integrated Report Coordinator
US EPA Region 7
Water Wetlands and Pesticides Division
Water Quality Management Branch
11201 Renner Blvd.
Lenexa, KS 66219
(913) 551 7067

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From: [Perkins, Bruce](#)
To: [Olson, John \[DNR\]](#)
Subject: More TMDLs
Date: Monday, February 25, 2013 2:20:12 PM

John,

I am also sending you these segments to delist for a new TMDL that was just approved today.

Yellow River	01-YEL-0070_1	E. coli
Yellow River the TMDL)	01-YEL-0080_1	E. coli (not listed but in
Yellow River	01-YEL-0080_2	E. coli
Yellow River	01-YEL-0080_3	E. coli
Dousman Creek	01-YEL-0090_0	E. coli
Suttle Creek	01-YEL-0100_0	E. coli
Unnamed Creek (aka Bear Creek)	01-YEL-0110_0	E. coli
Hickory Creek	01-YEL-0120_1	E. coli
Williams Creek	01-YEL-0125_0	E. coli
Norfolk Creek	01-YEL-0130_0	E. coli
Unnamed Creek	01-YEL-0150_0	E. coli
Unnamed Creek (aka Hecker Creek)	01-YEL-0155_0	E. coli
North Fork Yellow River	01-YEL-0160_0	E. coli

Bruce

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