



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 8

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SEP 3 0 2016

Ref: 8EPR-EP

Steven M. Pirner, Secretary  
Department of Environment & Natural Resources  
Joe Foss Building  
523 East Capitol  
Pierre, South Dakota 57501-3181

Re: Clean Water Act Section 303(d) Total Maximum Daily Load (TMDL) Waterbody List

Dear Mr. Pirner:

Thank you for your submittal of the South Dakota Department of Environment & Natural Resources (DENR) 2016 Water Quality Integrated Report received August 26, 2016. The Environmental Protection Agency Region 8 has conducted a complete review of the Clean Water Act Section 303(d) waterbody list (Section 303(d) list) and supporting documentation and information. The EPA has determined that South Dakota's 2016 Section 303(d) list meets the requirements of Section 303(d) of the Clean Water Act (CWA) and the EPA's implementing regulations found at 40 C.F.R. Part 130 and approves South Dakota's 2016 Section 303(d) list.

The EPA's approval of South Dakota's 2016 Section 303(d) list extends to waterbodies on the list with the exception of those waters that are within Indian country, as defined at 18 U.S.C. § 1151, which includes lands within the exterior boundaries of the following Indian reservations located within the State of South Dakota: Cheyenne River Indian Reservation, Crow Creek Indian Reservation, Flandreau Indian Reservation, Lower Brule Indian Reservation, Pine Ridge Indian Reservation, Rosebud Indian Reservation, Standing Rock Indian Reservation, Yankton Indian Reservation; any land held in trust by the United States for an Indian tribe; and any other areas which are "Indian country" within the meaning of 18 U.S.C. § 1151. EPA is taking no action with respect to the Indian country area at this time. EPA, or eligible Indian Tribes, as appropriate, will retain responsibilities for Indian country lands.

The attachment describes the statutory and regulatory requirements of the CWA Section 303(d) list and a summary of the EPA's review of South Dakota's compliance with each requirement. The EPA appreciates your work to produce South Dakota's 2016 Section 303(d) list. If you have questions, the most knowledgeable EPA staff person is Liz Rogers and she may be reached at (303) 312-6974.

Sincerely,

Martin Hestmark  
Assistant Regional Administrator  
Office of Ecosystems Protection  
and Remediation

Attachment

cc: Shannon Minerich, SDDENR  
Paul Lorenzen, SDDENR

Liz Rogers, EPA, 8-EPR-EP

# Review of South Dakota's 2016 Section 303(d) Waterbody List

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*Attachment to letter from Martin Hestmark, Acting Assistant Regional Administrator,  
Office of Ecosystems Protection and Remediation, US EPA, Region VIII to Steven M. Pirner, Secretary  
South Dakota Department of Environment & Natural Resources*

Date of Transmittal Letter from State: August 25, 2016  
Date of Receipt by EPA: August 26, 2016

## **I. Introduction**

South Dakota Department of Environment & Natural Resources (DENR) submitted their final 2016 Integrated Report (IR) to the Environmental Protection Agency (EPA) on August 26, 2016. Based on our review of the State's CWA Section 303(d) water body list ("Section 303(d) list"), EPA is approving South Dakota's 2016 list. The purpose of this review document is to describe the rationale for EPA's approval. The EPA's approval of South Dakota's 2016 Section 303(d) list extends to waterbodies on the list with the exception of those waters that are within Indian country, as defined at 18 U.S.C. § 1151, which includes lands within the exterior boundaries of the following Indian reservations located within the State of South Dakota: Cheyenne River Indian Reservation, Crow Creek Indian Reservation, Flandreau Indian Reservation, Lower Brule Indian Reservation, Pine Ridge Indian Reservation, Rosebud Indian Reservation, Standing Rock Indian Reservation, Yankton Indian Reservation; any land held in trust by the United States for an Indian tribe; and any other areas which are "Indian country" within the meaning of 18 U.S.C. § 1151. EPA is taking no action with respect to the Indian country area at this time. EPA, or eligible Indian Tribes, as appropriate, will retain responsibilities for Indian country lands.

In March 2011, EPA issued guidance for integrating the development and submission of 2012 Section 305(b) water quality reports and Section 303(d) lists of impaired waters. This guidance, and previous EPA guidance, recommends that states develop an Integrated Report of the quality of their waters by placing all waters into one of five assessment categories. By following this guidance, Category 5 of the Integrated Report is the State's Section 303(d) list. EPA's action in review and approval of this document is only on Category 5 that comprises the Section 303(d) list within the Integrated Report.

EPA reviewed the methodology used by the State in developing the Section 303(d) list and the State's description of the data and information it considered. EPA's review of South Dakota's 2016 Section 303(d) list is based on EPA's analysis of whether the State reasonably considered existing and readily available water quality-related data and information and reasonably identified waters required to be listed.

South Dakota's 2016 list is considered an update of the State's 2014 list, and as such, the Section 303(d) list EPA is approving today is comprised of 143 assessment units (208 waterbody/pollutant combinations), compared with 168 assessment units included on the 2014 list. States may add and take waters off their Section 303(d) lists based on several factors. For the 2016 cycle, South Dakota removed 48 waterbody/pollutant combinations from its year 2014 list.

## **II. Statutory and Regulatory Background**

### **A. Identification of Water Quality Limited Segments (WQLSs) for**

## **Inclusion on 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 EPA's long-standing interpretation of Section 303(d).

EPA regulations implementing Section 303(d) require states to identify water quality limited segments (WQLSs) that need TMDLs. 40 C.F.R. § 130.7(b). WQLSs<sup>1</sup> are defined in regulation as segments “where it is known that water quality does not meet applicable water quality standards, and/or is not expected to meet applicable water quality standards, even after the application of the technology-based effluent limitations required by sections 301(b) and 306 of the Act.” 40 C.F.R. § 130.2(j). Thus, states do not need to list waters where the following controls are adequate to implement applicable standards: (1) technology-based effluent limitations required by the CWA; (2) more stringent effluent limitations required by state or local authority; and (3) other pollution control requirements required by state, local, or federal authority. (40 C.F.R. §130.7(b)(1).)

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

In developing Section 303(d) lists, states are required to assemble and evaluate all existing and readily available water quality-related data and information, including, at a minimum, consideration of existing and readily available data and information about the following categories of waters: (1) waters identified as not meeting designated uses, or as threatened, in the State's most recent CWA Section 305(b) report; (2) waters for which dilution calculations or predictive modeling indicate nonattainment of applicable standards; (3) waters for which water quality problems have been reported by governmental agencies, members of the public, or academic institutions; and (4) waters identified as impaired or threatened in any Section 319 nonpoint assessment submitted to EPA. (40 C.F.R. §130.7(b)(5)). In addition to these minimum categories, states are required to consider any other data and information that is existing and readily available. 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, April 1991.) 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, EPA regulations at 40 C.F.R. §130.7(b)(6) require States to include, as part of their submissions to EPA, documentation to support decisions using or excluding particular data and information and decisions to list or not list waters. Such documentation needs to include, at a minimum, the following information: (1) a description of the methodology used to develop the list; (2) a description of the data and information used to identify waters; (3) a rationale for any decision not to use any existing and readily available data and information 40 C.F.R. §130.7(b)(5), and (4) any other reasonable information requested by the Region.

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<sup>1</sup> WQLSs may also be referred to as “impaired waterbodies” or “impairments” throughout this document.

### **C. Priority Ranking**

EPA regulations also codify and interpret the requirement in Section 303(d)(1)(A) of the CWA 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 WQLSs 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. (CWA Section 303(d)(1)(A)). As long as these factors are taken into account, the CWA provides that states establish priorities. States may consider other factors relevant to prioritizing waters for TMDL development, including immediate programmatic needs such as wasteload allocations for permits, 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 Fed. Reg. 33040, 33045 (July 24, 1992), and EPA's 1991 Guidance).

### **D. Applicable Water Quality Standards**

For purposes of identifying waters for the Section 303(d) list, the terms “water quality standard applicable to such waters” and “applicable water quality standards” refer to those water quality standards established under Section 303 of the Act. On April 27, 2000, EPA promulgated a rule under which the “applicable standard” for Clean Water Act purposes depends on when the relevant States or authorized Tribes promulgated that standard. Standards that States or authorized Tribes have promulgated before May 30, 2000 are effective upon promulgation by the States or authorized Tribes. Standards that States or authorized Tribes promulgated on or after May 30, 2000 become effective only upon EPA approval. 40 C.F.R. §131.21(c). EPA interprets CWA Section 303(d) to require EPA establishment or approval of section 303(d) lists only for impairments of waters with Federally-approved water quality standards.

## **III. Analysis of South Dakota's Submission**

### **A. Background**

In reviewing South Dakota's submittal, EPA first reviewed the methodology used by the State to develop their 2016 Section 303(d) list in light of South Dakota's approved water quality standards, and then reviewed the actual list of waters. The State's Assessment Methodology starts on Page 27 of the Integrated Report. EPA has reviewed the State's submission, and has concluded that the State developed its Section 303(d) list in compliance with Section 303(d) of the CWA and 40 C.F.R. §130.7. EPA's review is based on its analysis of whether the State reasonably considered existing and readily available water quality-related data and information and reasonably identified waters required to be listed. South Dakota considered all data and information pertaining to the categories under 40 C.F.R. §130.7(b)(5), and properly listed WQLSs under 40 C.F.R. §130.7(b)(1).

In previous guidance, EPA recommended that states develop an Integrated Report of the quality of their waters by placing all waters into one of five assessment categories. (See EPA's Guidance for 2006 Assessment, Listing and Reporting Requirements Pursuant to Sections 303(d), 305(b) and 314 of the Clean Water Act, July 21, 2005.) By following this guidance, Category 5 of the Integrated Report is the State's Section 303(d) list. EPA's action in review and approval of this document is only on Category 5 that comprises the Section 303(d) list within the Integrated Report.

The State's list was submitted to EPA Region 8 enclosed with correspondence dated August 25, 2016 from Steven M. Pirner, Secretary, Department of Environment & Natural Resources, in a document entitled "*Final 2016 South Dakota Integrated Report.*"

The year 2016 Integrated Report submitted to the EPA from the South Dakota DENR consisted of the following portions that are necessary for the Section 303(d) waterbody list:

- **Waterbodies and corresponding pollutants that make up the State's Section 303(d) list** (See Appendix D, Pages 195-204: 303(d) List of South Dakota's Impaired Waters Requiring TMDL studies).
- **Prioritization of waterbodies for TMDL development** (See Appendix D, Pages 195-204: 303(d) List of South Dakota's Impaired Waters Requiring TMDL studies).
- **Identification of waters targeted for TMDL development over the next biennium** (See Appendix D, Pages 195-204: 303(d) List of South Dakota's Impaired Waters Requiring TMDL studies).

EPA's approval action of South Dakota's year 2016 Section 303(d) list extends only to the items listed immediately above.

The 2016 Section 303(d) waters are found in the State's Integrated Report, Appendix D (303(d) List of South Dakota's Impaired Waters Requiring TMDL studies). Appendix D contains the following information for each waterbody: assessment unit identifier, waterbody name and location, cause of impairment ("pollutant"), cycle first listed, TMDL Priority, and TMDL Schedule.

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

EPA has reviewed South Dakota's description of the data and information it considered for identifying waters on the Section 303(d) list. EPA concludes that the State properly assembled and evaluated all existing and readily available data and information, including data and information relating to the categories of waters specified in 40 C.F.R. §130.7(b)(5) and properly identified and listed WQLSs as required by 40 C.F.R. §130.7(b)(1). In particular, the State relied on information from the 2016 Section 305(b) water quality assessments, assessments performed under the CWA Section 319 non-point source program, as well as data and information obtained through an extensive process to solicit information from state, federal and citizen sources. The State's evaluation of data and information in each of these categories is described below.

- *Waters identified by the state in its most recent section 305(b) report as "partially meeting" or "not meeting" designated uses or as "threatened"* (40 C.F.R. §130.7(b)(5)(i)): South Dakota produced a 2016 Integrated Report consistent with EPA's guidance regarding combined CWA 305(b) reports and 303(d) lists. EPA concludes that South Dakota made listing decisions using all existing and readily available data and information, in development of its 2016 Section 303(d) waterbody list.
- *Waters for which dilution calculations or predictive models indicate non-attainment of applicable water quality standards* (40 C.F.R. §130.7(b)(5)(ii)): South Dakota assembled and evaluated information from past and anticipated dilution calculations and predictive modeling. EPA concludes that South Dakota properly considered waters for which dilution calculations or predictive models indicate nonattainment of applicable water quality standards in development of its 2016 Section 303(d) waterbody list.

- *Waters for which water quality problems have been reported by local, state, or federal agencies; members of the public; or academic institutions (40 C.F.R. §130.7(b)(5)(iii)):* The State solicited data and information in preparation for the 2016 Section 303(d) list. Data and information obtained as a result of this effort were evaluated and considered. The State’s submittal identified several entities that contributed data or information and responded to public comments related to assessments for individual waterbodies.

- *Waters identified by the State as impaired or threatened in a nonpoint assessment submitted to EPA under Section 319 of the CWA or in any updates of the assessment (40 C.F.R. §130.7(b)(5)(iv)):* The State's 2016 Section 303(d) list includes all waters that have data to support nonpoint source pollution impairment. South Dakota’s listing approach and methodologies direct CWA Section 319 activities and resources to the highest priorities. Watershed assessments are often conducted for waterbodies that are already listed in order to collect current data to support TMDL development.

Based upon its review, EPA concludes that, with regard to the waters identified in the State’s 2016 Section 303(d) list, the State’s process for developing that list substantially meets the requirements of 40 C.F.R. §130.7(b)(i-iv) regarding the consideration of all existing and readily available water quality-related data and information, as well as the requirements of 40 C.F.R. Part 130.7(b)(1).

### C. Waters Removed from the Section 303(d) List

In addition to adding WQLSs that require TMDLs to its 303(d) list, a state may also remove waters from its list when such removal is justified. EPA has identified four reasons that justify the removal of a water from a state’s 303(d) list. These are:

1. The state has prepared and EPA has approved a TMDL for the listed water.
2. The original basis for listing the water was incorrect.
3. New data or information indicates that the applicable water quality standard for the water is being met and its designated uses are fully supported.
4. The state has adopted and EPA has approved a site-specific water quality standard for the water, and the new water quality standard is being met.

A full accounting of waters removed from the State’s 2014 303(d) list is provided on Page 25 and in Appendix B, Pages 185-188 of the Integrated Report. The states removal decisions and stated justifications are summarized below:

<b>Number of Waterbody-Pollutant Combinations Removed from List</b>	
<b>Reason</b>	<b>2016</b>
TMDL completed and approved by EPA	20
Original basis for listing was incorrect	2
New data or information indicate applicable WQS is being met	26
Total	48

In reviewing the State’s 2016 Section 303(d) waterbody list, EPA carefully considered South Dakota’s decision to remove certain waterbody-pollutant combinations from the State’s 2014 303(d) list, its

justification from those removals, and the methodology it used in making those decisions. EPA concludes that the removal decisions identified in the Integrated Report are based on all existing and readily available water quality-related data and information, and that the removal decisions are properly justified.

#### **D. Priority Ranking and Schedule for Development of TMDLS for Listed Waters and Pollutants**

Pursuant to the listing methodology set out in the State's submittal, South Dakota prioritized WQLSs for TMDL development into two Priority Areas: Priority 1 (Documented health problems or a threat to human health; Waters listed as impaired because of bacteria, TSS, temperature in waters assigned coldwater fisheries, or mercury in fish flesh; Waters where TMDL development is expected during the next two years; or Waters with documented local support for water quality improvement) and Priority 2 (Waters where local support for TMDL development is expected but not documented; Waters having impairments not listed as Priority 1; Waters with no evident local support for water quality improvements; or Waters where impairments are believed to be due largely to natural causes). South Dakota's TMDL prioritization strategy is fully described starting on Page 17 of South Dakota's Integrated Report.

EPA reviewed the State's priority ranking of listed waters for TMDL development, and concluded that the State properly took into account the severity of pollution and the uses to be made of such waters, as required by 40 C.F.R. 130.7(b)(4), as well as other relevant factors such as imminent human health problems or local support for water quality improvement. In addition, EPA concluded that the State listed WQLS targeted for TMDL development in the next two years, as required by 40 C.F.R. 130.7(d).

#### **IV. Final Recommendation on South Dakota's 2016 Section 303(d) List Submittal**

After careful review of South Dakota's final Section 303(d) list submittal package, EPA has determined that South Dakota's 2016 Section 303(d) list meets the requirements of Section 303(d) of the Clean Water Act (CWA) and EPA's implementing regulations and approves South Dakota's 2016 Section 303(d) list.

#### **V. References**

The following list includes documents that were used directly or indirectly as a basis for EPA's review and approval of the State's Section 303(d) waterbody list. This list is not meant to be an exhaustive list of all records, but to provide the primary documents the Region relied upon in making its decisions to approve the State's list.

40 C.F.R. Part 130 Water Quality Planning and Management

40 C.F.R. Part 131 Water Quality Standards

July 29, 2005, Memorandum from Diane Regas, Director, Office of Wetlands, Oceans, and Watersheds, US EPA to Water Division Directors transmitting EPA's "Guidance for 2006 Assessment, Listing and Reporting Requirements Pursuant to Sections 303(d), 305(b) and 314 of the Clean Water Act"

October 12, 2006, Memorandum from Diane Regas, Director, Office of Oceans, Wetlands, and Watersheds entitled *Information Concerning 2008 Clean Water Act Sections 303(d), 305(b), and 314 Integrated Reporting and Listing Decisions*.

May 5, 2009, Memorandum from Suzanne Schwartz, Acting Director, Office of Wetlands, Oceans, and Watersheds, entitled *Information Concerning 2010 Clean Water Act Sections 303(d), 305(b), and 314 Integrated Reporting and Listing Decisions*.

March 21, 2011, Memorandum from Denise Keehner, Director, Office of Wetlands, Oceans, and Watersheds, entitled *Information Concerning 2012 Clean Water Act Sections 303(d), 305(b), and 314 Integrated Reporting and Listing Decisions*.

April 1991, "Guidance for Water Quality-Based Decisions: The TMDL Process," EPA 440/4-91-001.

July 24, 1992 Federal Register Notice, *40 C.F.R. Parts 122, 123, 130, Revision of Regulation*, 57 FR 33040.

August 8, 1997, Memorandum from Robert Perciasepe, Assistant Administrator for Water, US EPA, regarding "New Policies for Establishing and Implementing TMDLs."

September, 1997, Guidance from Office of Water, Headquarters, US EPA regarding "Guidelines for Preparation of the Comprehensive State Water Quality Assessments (305(b) Reports) and Electronic Updates" Supplement, EPA-841-B-97-002B.

November 5, 1997, Memorandum from Tudor Davies, Director, Office of Science and Technology to Water Management Division Directors entitled "Establishing Site Specific Aquatic Life Criteria Equal to Natural Background."

August 23, 1999, Federal Register Notice. *Proposed Revisions to the Water Quality Management and Planning Regulations*, 64 FR 46012.

April 27, 2000, Federal Register Notice, *EPA Review and Approval of State and Tribal Water Quality Standards*, 65 FR 24641

February 28, 2012, letter from Elizabeth Rogers, Monitoring and Assessment Team, Water Quality Unit, Ecosystems Protection Program, US EPA Region VIII, to Shannon Minerich, Surface Water Quality Program, South Dakota Department of Environment and Natural Resources.

September 3, 2013, US EPA Memorandum, Information Concerning 2014 Clean Water Act 303(d), 305(b) and 314 Integrated Reporting and Listing Decisions

September 3, 2013, US EPA Memorandum, Information Concerning 2014 Clean Water Act 303(d), 305(b) and 314 Integrated Reporting and Listing Decisions

March 27, 2014, South Dakota Department of Environment & Natural Resources response regarding EPA's comments on South Dakota's 2014 draft Integrated Report.

August 13, 2015, US EPA Memorandum, Information Concerning 2016 Clean Water Act Sections 303(d), 305(b) and 314 Integrated Reporting and Listing Decisions

June 7, 2016, letter from Elizabeth Rogers, Monitoring and Assessment Team, Water Quality Unit, Ecosystems Protection Program, US EPA Region VIII, to Shannon Minerich, Surface Water Quality Program, South Dakota Department of Environment and Natural Resources.

August 25, 2016, South Dakota Department of Environment & Natural Resources response regarding EPA's comments on South Dakota's 2016 draft Integrated Report.