



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8

1595 Wynkoop Street
Denver, CO 80202-1129
Phone 800-227-8917
<http://www.epa.gov/region08>

ENVIRONMENTAL
PROTECTION AGENCY
JAN 25 2011
MONTANA OFFICE

Ref: 8EPR-EP

JAN 21 2010

Richard Opper, Director
Montana Department of Environmental Quality
P.O. Box 200901
Helena, Montana 59620-0901

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


Dear Mr. Opper:

Thank you for your submittal of the Montana Department of Environmental Quality (DEQ)'s 2010 Water Quality Integrated Report (IR) dated December 13, 2010. The Environmental Protection Agency Region 8 (EPA) has conducted a complete review of the Clean Water Act (CWA) Section 303(d) waterbody list (Section 303(d) list) and supporting documentation and information. EPA has determined that Montana's 2010 Section 303(d) list meets the requirements of Section 303(d) of the Clean Water Act (CWA) and EPA's implementing regulations and approves Montana's 2010 Section 303(d) list, excluding any water quality assessments of electrical conductivity (EC) and sodium adsorption ratio (SAR) exceedances for waters in the Tongue River and Powder River Watersheds.

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. For the 2010 IR, several waterbodies in the Tongue and Powder River watersheds remain on the 303(d) list as impaired for salinity based on a 2008 interpretation of the numeric EC and SAR criteria. The October 13, 2009 decision by the United States District Court for the District of Wyoming in the *Pennaco Energy Inc. v. U.S. Environmental Protection Agency* (D. Wyo. 06-CV-100-B) litigation vacated EPA's approval of Montana's water quality standards for EC and SAR. This means that these criteria are no longer effective for CWA purposes. Until such time as standards for EC and SAR are federally-approved, there would be no basis under CWA Section 303(d) to approve waters listed as impaired for salinity based on the EC or SAR criteria. Because the *Pennaco* decision vacated the numeric EC and SAR standards for CWA purposes, any waters listed based on EC and SAR exceedances were excluded from our review and approval.

The enclosure describes, in detail, the statutory and regulatory requirements and a summary of EPA's review of Montana's compliance with each requirement.

We appreciate your work to produce Montana's 2010 Section 303(d) list. If you have questions, the most knowledgeable EPA staff person is Tina Laidlaw and she may be reached at (406) 457-5016.

Sincerely,



Carol L. Campbell
Assistant Regional Administrator
Office of Ecosystems Protection
and Remediation

Enclosure

cc: Claudia Massman, MTDEQ
Mark Bostrom, MTDEQ
George Mathieus, MTDEQ
Michael Pipp, MTDEQ
Julie DalSoglio, USEPA 8MO
Ron Steg, USEPA 8MO



Review of Montana's 2010 Section 303(d) Waterbody List

*Attachment to letter from Carol L. Campbell, Assistant Regional Administrator,
Office of Ecosystems Protection and Remediation, US EPA, Region 8 to Richard Oppen, Director
Montana Department of Environmental Quality*

Date of Integrated Report Transmittal from State: December 13, 2010
Date of Receipt by EPA: December 13, 2010

I. Introduction

Montana Department of Environmental Quality (DEQ) submitted their final 2010 Integrated Report (IR) to EPA on December 13, 2010. The purpose of this review document is to describe the rationale for EPA's approval of Montana's 2010 Clean Water Act (CWA) Section 303(d) waterbody list ("Section 303(d) list"). The following sections identify those key elements to be included in the list submittal based on the CWA and EPA regulations. (See 40 C.F.R. §130.7). On May 5, 2009, EPA issued guidance for integrating the development and submission of 2010 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 Montana's 2010 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.

Montana's 2010 list is considered an update of the State's 2008 list, and as such, the Section 303(d) list EPA is approving today is comprised of 610 assessment units compared with 664 assessment units included on the 2008 list. States may add and take waters off their Section 303(d) lists based on several factors. For the 2010 cycle, Montana delisted 352 waterbody-pollutant cause combinations from the 2008 303(d) list. The majority (326 waterbody/pollutant combinations) were delisted based on an EPA-approved total maximum daily load (TMDL).

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 provide that 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. (See 40 C.F.R. §130.7(b)(1)).

Note: The term "water quality limited segment," as defined by federal regulations, may also be referred to as "impaired waterbodies" or "impairments" throughout this document.

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. (See 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; and (3) any other reasonable information requested by the Region.

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 water quality limited segments (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. (See 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 FR 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 state or tribe promulgated that standard. Standards that states or tribes have promulgated before May 30, 2000, are effective upon promulgation by the states or tribes. Standards that states or tribes promulgated on or after May 30, 2000, become effective only upon EPA approval. (See 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. For the 2010 IR, several waterbodies in the Tongue and Powder River watersheds remain on the 303(d) list as impaired for salinity based on a 2008 interpretation of the numeric EC and SAR criteria. The October 13, 2009 decision by the United States District Court for the District of Wyoming in the *Pennaco Energy Inc. v. U.S. Environmental Protection Agency* (D. Wyo. 06-CV-100-B) litigation vacated EPA's approval of Montana's water quality standards for EC and SAR. This means that these criteria are no longer effective for CWA purposes. Until such time as standards for EC and SAR are federally-approved, there would be no basis under CWA Section 303(d) to approve waters listed as impaired for salinity based on the EC or SAR criteria. Because the *Pennaco* decision vacated the numeric EC and SAR standards for CWA purposes, any waters listed based on EC and SAR exceedances were excluded from our review and approval.

III. Analysis of Montana's Submission

A. Background

In reviewing Montana's submittal, EPA first reviewed the methodology used by the State to develop their 2010 Section 303(d) list in light of Montana's approved water quality standards, and then reviewed the actual list of waters. The State's Assessment Methodology is briefly summarized on pages 4-6 to 4-7 of the Integrated Report. In addition, the entire assessment

method can be viewed on the State's website (<http://deq.mt.gov/wginfo/QAProgram/default.mcpx>; see WQPBWQM-001 Rev 2: Water Quality Assessment Method). For future Integrated Reports, we recommend DEQ include the entire assessment methodology as part of the Integrated Report or as an appendix so the process used to make attainment decisions is easily available when reviewing the document. 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. Montana considered all data and information pertaining to the categories under 40 C.F.R. §130.7(b)(5).

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 Guidance for 2006 Assessment, Listing and Reporting Requirements Pursuant to Sections 303(d), 305(b) and 314 of the Clean Water Act*, EPA Office of Water, 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 December 13, 2010, from Richard Opper, Director of Montana DEQ, in a document entitled *Montana 2010 Final Water Quality Integrated Report*.

The year 2010 Integrated Report submitted to the EPA, from the Montana DEQ 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 B: Waters in need of TMDLs [303(d) list] and TMDL schedule).
- **Prioritization of waterbodies for TMDL development** (*See* Appendix B: Waters in need of TMDLs [303(d) list] and TMDL schedule).
- **Identification of waters targeted for TMDL development over the next biennium** (*See* Appendix B: Waters in need of TMDLs [303(d) list] and TMDL schedule).

EPA's approval action of Montana's year 2010 Section 303(d) list extends only to the items listed immediately above.

The 2010 Section 303(d) waters are found in Appendix B ("Waters in need of TMDLs [303(d) list] and TMDL Priority Schedule") of the State's Integrated Report. Tables included in Appendix B contain the following information for each waterbody: TMDL planning area, watershed and hydrologic unit code ("HUC"), assessment unit identifier ("ID305B"), waterbody name and location, cause of impairment ("pollutant"), cycle first listed, TMDL status, and the priority ranking.

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

EPA has reviewed Montana'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). In particular, the State relied on information from the 2010 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)): Montana produced a 2010 Integrated Report consistent with EPA's guidance regarding combined CWA 305(b) reports and 303(d) lists. EPA concludes that Montana made listing decisions consistent with results from the CWA Section 305(b) assessment, using all existing and readily available data and information, in development of its 2010 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)): Montana assembled and evaluated information from past and anticipated dilution calculations and predictive modeling. EPA concludes that Montana properly considered waters for which dilution calculations or predictive models indicate nonattainment of applicable water quality standards in development of its 2010 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 2010 Section 303(d) list. Data and information obtained as a result of this effort were evaluated and considered.
- *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 2010 Section 303(d) list includes all waters that have data to support nonpoint source pollution impairment. Montana's listing approach and methodologies direct 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 concluded that the State's process for developing its 2010 Section 303(d) list meets the requirements of Federal regulation regarding the consideration of all existing and readily available water quality-related data and information, consistent with the expectations of 40 C.F.R. §130.7(b)(5)(i-iv)).

C. Section 303(d) Delistings (40 C.F.R. §130.7(b)(6)(iv))

According to EPA regulations, each state must demonstrate good cause for not including waters on the list. (See 40 C.F.R. §130.7(b)(6)(iv).) EPA acknowledges that states may re-evaluate the waters on their Section 303(d) lists. In an August 1997 memorandum, EPA stated that “. . . Regions and states should keep in mind that waterbodies may be added or subtracted over time as new lists are developed.” (See *New Policies for Establishing and Implementing TMDLs*, EPA Office of Water, August 8, 1997). The existing EPA regulations require states, at the request of the Regional Administrator, to demonstrate good cause for not including waterbodies on their lists. (See 40 C.F.R. §130.7(b)(6)(iv)). Accordingly, in the May 15, 2009 guidance for preparing the 2010 Integrated Report, EPA identified good cause conditions that allow states to remove previously-listed waters from Section 303(d) list.

In its review of the State’s 2010 Section 303(d) waterbody list, EPA carefully reviewed the methodology and resultant delistings from Montana’s list. A full accounting of waters delisted from the 2008 list is provided in Appendix D (pages D1-D17). The table in Appendix D includes a column describing the reason for delisting each of the waters. For the 352 assessment unit/pollutant cause combinations that have been delisted in 2010, the decisions to take the waters off the list are based on: 1) a TMDL was completed and approved by EPA (326 assessment units); 2) the impairment is due to a non-pollutant (3 waters); 3) original basis for listing was incorrect (15 AUs); and 4) new data or information indicate full support of designated uses (water quality standards are being met) (8 AUs).

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, Montana prioritized water quality limited segments for TMDL development according to the severity of the impairment and the designated uses of the segment, taking into account the most serious water quality problems, most valuable and threatened resources, and risk to human health and aquatic life. Montana’s TMDL prioritization strategy is fully described in Appendix B of Montana’s 2010 Section 303(d) list submission package.

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 well as other relevant factors such as imminent human health problems or local support for water quality improvement. In addition, EPA reviewed the State’s list of WQLS targeted for TMDL development in the next two years, and concluded that the targeted waters are appropriate for TMDL development in this time frame.

IV. Final Recommendation on Montana’s 2010 Section 303(d) List Submittal

After careful review of Montana’s final Section 303(d) list submittal package, EPA has determined that Montana’s 2010 Section 303(d) list meets the requirements of Section 303(d) of

the Clean Water Act (CWA) and EPA's implementing regulations and approves Montana's 2010 Section 303(d) list, excluding any water quality assessments of electrical conductivity (EC) and sodium adsorption ratio (SAR) exceedances for waters in the Tongue River and Powder River Watersheds.

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, US EPA, to Water Division Directors entitled *Information Concerning 2010 Clean Water Action Sections 303(d), 305(b), and 314 Integrated Reporting and Listing Decisions*.

May 15, 2007 letter from Humberto Garcia, Director, Ecosystems Protection Program, EPA Region 8 to Art Compton, Division Director, Montana Department of Environmental Quality regarding 2010 Cycle Integrated Reports.

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

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

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

September 1997 Guidance from Office of Water, 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

USEPA. 2004. *Guidance for 2004 Assessment, Listing and Reporting Requirements Pursuant to Sections 303(d), 305(b) and 314 of the Clean Water Act*. U.S. Environmental Protection Agency Office of Water, Office of Wetlands, Oceans, and Watershed, Assessment and Watershed Protection Division. Washington, DC.

USEPA. 2005. *Guidance for 2006 Assessment, Listing and Reporting Requirements Pursuant to Sections 303(d), 305(b) and 314 of the Clean Water Act*. U.S. Environmental Protection Agency Office of Water, Office of Wetlands, Oceans, and Watershed, Assessment and Watershed Protection Division. Washington, DC.