



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8

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APR 26 2018

Ref: 8WP-CWQ

Dr. Erica Gaddis
Director
Utah Division of Water Quality, Department of Environmental Quality
195 North 1950 West
P.O. Box 144870
Salt Lake City, Utah 84114-4870

Re: The State of Utah's 2016 Clean Water Act Section 303(d) Waterbody List

Dear Dr. Gaddis:

Thank you for your submittal of the State of Utah's 2016 Water Quality Integrated Report (IR) that includes the State's Clean Water Act (CWA) Section 303(d) list of impaired waters (Section 303(d) list) for 2016. The Environmental Protection Agency, Region 8 (EPA) received this submittal on December 7, 2016. The EPA also received Utah's 2016 assessment attribute and geographic information system (GIS) data, submitted with the Integrated Report. The EPA has completed its review of the State's Section 303(d) list and supporting documentation and information.

Based on our review of the Section 303(d) list, the EPA is taking a "partial approval" action on Utah's 2016 list. Specifically, the EPA approves the State's decision to list all the waterbodies identified on Utah's list submission, as well as the State's decision not to list certain waters. However, the EPA is taking no action at this time with regard to segments of the Great Salt Lake, including Farmington Bay, and its surrounding wetlands.

For the Great Salt Lake, the Utah Division of Water Quality (DWQ) indicated in 2012 that it lacked sufficient data for an assessment. At that time, the EPA deferred action on Great Salt Lake, and has since begun developing assessment methodologies to evaluate readily available mercury and nutrient data for the Lake. The Agency's data evaluation is ongoing, and the EPA is continuing its deferral of Great Salt Lake, including its surrounding wetlands, and Farmington Bay until this work is completed. We expect this deferral will be resolved during the current 2018 listing cycle.

As part of today's action, EPA is approving Utah's inclusion of Six Mile Creek on the 2016 303(d) list for *Escherichia coli* (*E. coli*). The EPA initially deferred action on the State's decision not to list Six Mile Creek in its 2012/2014 Section 303(d) list while DWQ refined its assessment methods. Today's action resolves that deferral.

Further details of our "partial approval" action are provided in the attachment, which describes the statutory and regulatory requirements of the CWA Section 303(d) list and a summary of the EPA's

review of Utah's compliance with each requirement. The EPA's partial approval of Utah's 2016 Section 303(d) list extends to all waterbodies on the lists with the exception of those waters that are within Indian country, as defined in 18 U.S.C. § 1151.

The EPA appreciates the State of Utah's efforts to submit the final 2016 Integrated Report. The Agency commends Utah DWQ for its hard work in completing its public review process, including their response to stakeholder comments, for the Integrated Report, for making significant progress on data management revisions to support the Integrated Report development, and for its ongoing efforts to revise the State's assessment methodology.

If you have questions about this decision, the most knowledgeable person on my staff is Karl Hermann and he may be reached at (303) 312-6628.

Sincerely,

A handwritten signature in black ink, consisting of a large, stylized 'D' followed by a horizontal line that ends in a small hook.

Darcy O'Connor
Assistant Regional Administrator
Office of Water Protection

Attachment

Review of Utah's 2016 Section 303(d) Waterbody List

*Attachment to letter from Darcy O'Connor, Assistant Regional Administrator,
Office of Water Protection, US EPA, Region 8 to Erica Gaddis, Director,
Utah Division of Water Quality, Utah Department of Environmental Quality*

Date of Transmittal Letter from State: December 7, 2016
Date of Electronic Receipt by the EPA: December 7, 2016

I. Introduction

The Environmental Protection Agency Region 8 (EPA) received the State of Utah's 2016 Clean Water Act (CWA) Section 303(d) list of impaired waters from the Utah Division of Water Quality (DWQ) on December 7, 2016. The EPA also received Utah's 2016 Water Quality Integrated Report and Utah's 2016 assessment attribute and geographic information system (GIS) data with the same submittal. Based on our review of the State's CWA Section 303(d) water body list ("Section 303(d) list" or "list") and assessment database, the EPA is partially approving Utah's 2016 list with further action pending. The purpose of this document is to describe the rationale for the EPA's partial approval.

In August 2015, the EPA issued guidance for integrating the development and submission of 2016 Section 305(b) water quality reports and Section 303(d) lists of impaired waters. This guidance and previous EPA guidance recommend 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 a state's Section 303(d) list. The EPA's action in review and approval of this document is limited to Category 5 that comprises the Section 303(d) list within the Integrated Report.

The EPA reviewed the methodology used by the State in developing the 2016 Section 303(d) list and the State's description of the data and information it considered. The EPA's review of Utah's 2016 Section 303(d) list is based on the EPA's analysis of whether the State reasonably considered existing and readily available water quality-related data and information and reasonably identified waters to be listed in Category 5.

Utah's 2016 303(d) list is considered an update of the State's 2014 list. The 2016 Section 303(d) list, which the EPA is partially approving today, is comprised of 286 assessment units (516 waterbody / pollutant combinations), compared with 275 assessment units (466 waterbody / pollutant combinations) 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, Utah removed 44 segment-based, waterbody / pollutant combinations from its year 2014 list.

The EPA has resolved one of its "further action pending" issues from the 2014 303(d) list. Utah has added Six Mile Creek (UT16010101-002) to the 2016 303(d) list for *E.coli*. With today's approval, the Six Mile Creek deferred action has been resolved.

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, considering 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 implementing Section 303(d) require states to identify water quality limited segments (WQLSs) that need TMDLs. 40 C.F.R. § 130.7(b). WQLSs¹ 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, 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 the 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 guidance 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.)

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 list or not to 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

¹ WQLSs may also be referred to as "impaired waterbodies" or "impairments" throughout this document.

description of the data and information used to identify waters; and (3) a rationale for any decision not to use any existing and readily available data and information as described in 40 C.F.R. § 130.7(b)(5). The state must also provide "any other reasonable information" concerning a state's Section 303(d) listing decisions, if requested by the Region. 40 C.F.R. § 130.7(b)(6)(iv).

C. Priority Ranking

The 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 to identify those WQLSs targeted for TMDL development in the next two years. In prioritizing and targeting waters, states must, at a minimum, consider the severity of the pollution and the uses to be made of such waters. CWA Section 303(d)(1)(A). 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 the 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 CWA. On April 27, 2000, the EPA promulgated a rule under which the "applicable standard" for CWA purposes depends on when the relevant states or authorized tribes promulgated that standard. Standards that states or authorized tribes 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). The EPA interprets CWA Section 303(d) to require the EPA establishment or approval of section 303(d) lists only for impairments of waters with Federally-approved water quality standards.

III. Analysis of Utah's Submission

A. Overview of EPA's Review Process

The State made its 2016 Integrated Report and the 2016 assessment attribute and geographic information system (GIS) data available to EPA Region 8 electronically on December 7, 2016. The Integrated Report from Utah consisted of the following portions that are required for the Section 303(d) waterbody list:

- Waterbodies and corresponding pollutants that make up the State's Section 303(d) list;
- Prioritization of waterbodies for TMDL development; and
- Identification of waters targeted for TMDL development over the next biennium.

Neither the CWA nor the EPA's implementing regulations require that the Agency review *de novo* all the underlying data and information that a state uses to create its Section 303(d) list. Instead, the EPA generally reviews whether the state has complied with the procedural requirements of 40 C.F.R. § 130.7(b) and typically defers to a state's decision to add waters to its list when it has complied with those procedures.

In reviewing Utah's submittal, the EPA first reviewed the methodology used by the State to develop their 2016 Section 303(d) list considering Utah's approved water quality standards. The final Utah 2016 assessment methodology, which had been through a public review process of its own and was included in the Public Notice draft of the Integrated Report, was a part of Utah DWQ's December 7, 2016 Integrated Report submittal. The EPA determined that the State appropriately applied their 2016 assessment methodology to develop their final Section 303(d) list.

EPA then reviewed the 303(d) listed individual waters. For those waters that appear on the list, EPA concluded that Utah considered 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).

The EPA notes that the submitted list of waters does not include the Farmington Bay portion of Great Salt Lake. Chapter 6 of Utah's Integrated Report submittal presents data for harmful algal blooms (HABs) in this segment and shows results from the State's application of its HABs assessment methodology. The Integrated Report does not, however, include a final assessment conclusion. Utah indicates that its decision to not list Farmington Bay is "because assessment methods are still under development for the Great Salt Lake" (Chapter 5, 2016 IR).

When a state has credible data, a designated use (recreation), an assessment methodology, and a completed assessment, EPA would expect a final assessment decision. However, the EPA notes that the State received, and is currently considering, comments critiquing the application of the State's freshwater HABs assessment methodology in the hydrologically unique waters of Great Salt Lake. Additionally, the EPA is also re-evaluating the scientific basis for assessing HABs in the highly saline conditions of Farmington Bay. The EPA is deferring action on the State's decision not to list Farmington Bay (UT-L-16020310-004) to allow the Agency and DWQ to continue making progress in refining the State's assessment methodology for HABs in Farmington Bay. The EPA expects that this deferral will be resolved during the next IR cycle.

The EPA is also taking no action at this time on Great Salt Lake for mercury impairment, which Utah indicates has insufficient information for an assessment. Specifically, the EPA is deferring action on Utah DWQ assessment units UT-L-16020310-001 (Gilbert Bay), UT-L-16020310-002 (Gunnison Bay), UT-L-16020310-003 (Bear River Bay), UT-L-16020310-004 (Farmington Bay), the Transitional Waters along the Shoreline of the Great Salt Lake, and the National Wildlife Refuges, State Waterfowl Management Areas, and other areas associated with Great Salt Lake, for mercury impairment. The Agency is carefully evaluating the utility and applicability of the mercury aquatic wildlife adverse effects values currently available in the scientific literature to determine if an assessment is possible for GSL. We expect that the deferral will be resolved as part of the next IR cycle.

For those waters that appear on the 303(d) list, EPA concluded that Utah considered 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).

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

The EPA has reviewed Utah's description of the data and information it considered for identifying waters on the Section 303(d) list. The EPA concludes that, except for Great Salt Lake (including Farmington Bay), 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). 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)): Utah produced its 2016 Integrated Report consistent with the EPA's guidance regarding combined CWA 305(b) reports and 303(d) lists. The EPA concludes that Utah made listing decisions using existing and readily available data and information, in development of its 2016 Section 303(d) waterbody list (except for those waters for which the Agency is deferring action).
- *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)): Utah assembled and evaluated information from past and anticipated dilution calculations and predictive modeling. The EPA concludes that Utah 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 its 2016 Section 303(d) list. Data and information obtained 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 the 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. Utah'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, the EPA concludes that, except for Great Salt Lake, the State's process for developing the list substantially meets the requirements of 40 C.F.R. § 130.7(b)(5)(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. § 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 appropriate. The EPA has identified four reasons that warrant the removal of a water from a state's 303(d) list. These are:

1. The state has prepared and the 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 the 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 2010 303(d) list is provided in the electronic data that Utah DWQ submitted to EPA. The State's removal decisions and stated justifications for its 2016 303(d) list are summarized below:

Number of Waterbody-Pollutant Combinations Removed from List	
Reason	2016
TMDL completed and approved by the EPA	0
Change in assessment methodology resulted in WQS being met	3
New data or information indicate applicable WQS is being met	26
Previously Listed in Error	15
Total	44

In reviewing the State's 2016 Section 303(d) waterbody lists, the EPA carefully considered Utah's decision to remove certain waterbody-pollutant combinations from the State's 2014 303(d) list, its justification for those removals, and the methodology it used in making those decisions. The 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 appropriate.

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, Utah prioritized WQLSs for TMDL development into two Priority Areas: Priority 1 (imminent human health problems; waters where TMDL development is expected during the next two years; waters listed for four or more causes; or waters with documented widespread local support for water quality improvement) and Priority 2 (waters listed for three or less causes; waters where local support for TMDL development is expected but not documented; waters with no evident local support for water quality improvements; or waters where impairments are believed to be due largely to natural causes). Utah's TMDL prioritization strategy is fully described starting on Page 17 of Utah's Integrated Report.

The EPA reviewed the State's priority ranking of listed waters for TMDL development, and concluded that the State properly considered 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, the 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 Decision on Utah's 2016 Section 303(d) List Submittal

After careful review of Utah's final Section 303(d) list submittal package, the EPA has determined that Utah'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 except with respect to waters of the GSL (including Farmington Bay). As a result, the EPA partially approves Utah's 2016 Section 303(d) list with further action regarding GSL pending.

V. References

The following list includes documents that were used directly or indirectly as a basis for the EPA's review and approval of the state's Section 303(d) waterbody list. This 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

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.

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

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*.

September 3, 2013, Memorandum from Denise Keehner, Director, Office of Wetlands, Oceans, and Watersheds, entitled *Information Concerning 2014 Clean Water Act Sections 303(d), 305(b), and 314 Integrated Reporting and Listing Decisions*.

August 13, 2015, Memorandum from Benita Best-Wong, Director, Office of Wetlands, Oceans, and Watersheds, entitled *Information Concerning 2016 Clean Water Act Sections 303(d), 305(b), and 314 Integrated Reporting and Listing Decisions*.