Review of Utah's 2012 and 2014 Section 303(d) Waterbody Lists

Attachment to letter from Martin Hestmark, Assistant Regional Administrator,
Office of Ecosystems Protection and Remediation, US EPA, Region 8 to Walt Baker, Director
of the Division of Water Quality, Utah Department of Environmental Quality

Date of Transmittal Letter from State: March 27, 2015

Date of Electronic Receipt by the EPA: March 27, 2015

I. Introduction

The Environmental Protection Agency Region 8 (EPA) received the State of Utah's 2012 and 2014 Clean Water Act (CWA) Section 303(d) lists of impaired waters from the Utah Division of Water Quality (DWQ) on March 27, 2015. The EPA also received Utah's 2012/2014 Water Quality Integrated Report and Utah's 2012/2014 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") and assessment database, the EPA is partially approving Utah's 2012 and 2014 lists with further action pending. The purpose of this review document is to describe the rationale for the EPA's approval.

In March 2011, the 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. In September 2013, the EPA issued guidance for integrating the development and submission of 2014 Section 305(b) water quality reports and Section 303(d) lists of impaired waters. These guidances, 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. The 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 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. The EPA's review of Utah's 2012 and 2014 Section 303(d) lists 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 required to be listed.

Utah's 2012 list is considered an update of the State's 2010 list and Utah's 2014 list is considered an update of the State's 2012 list. The 2012 Section 303(d) list the EPA is partially approving today is comprised of 128 assessment units (190 waterbody / pollutant combinations), compared with 112 assessment units (156 waterbody / pollutant combinations) included on the 2010 list. The 2014 Section 303(d) list the EPA is partially approving today is comprised of 275 assessment units (466 waterbody / pollutant combinations). States may add and take waters off their Section 303(d) lists based on several factors. For the 2014 cycle, Utah removed 40 segment-based, waterbody / pollutant

combinations from its year 2012 list. For the 2012 cycle, Utah did not remove any segment-based, waterbody / pollutant combinations from its year 2010 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 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, 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 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. The EPA's 1991 Guidance for Water Quality-Based Decisions describes categories of water quality-related data and information that may be existing and readily available. (See Guidance for Water Quality-

2

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

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 on or not rely on particular data or information in determining whether to list particular waters.

In addition to requiring states to assemble and evaluate all existing and readily available water quality-related data and information, the EPA regulations at 40 C.F.R. §130.7(b)(6) require States to include, as part of their submissions to the EPA, documentation to support decisions 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.

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 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 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 Act. On April 27, 2000, the 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). 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. Background

In reviewing Utah's submittal, the EPA first reviewed the methodology used by the State to develop their 2012 and 2014 Section 303(d) lists in light of Utah's approved water quality standards, and then reviewed the actual lists of waters. The State utilized their 2010 assessment methodology, with minor revisions for their 2012/2104 water quality assessments. EPA acquired that assessment methodology from Utah DWQ's website in May 2014 when it was posted with the first Utah DWQ Public Notice draft of the combined 2012/2014 Integrated Report. The EPA reviewed the State's 2012/2014 assessment methodology product, which later became the State's submission, and has concluded that the State developed its Section 303(d) lists in compliance with Section 303(d) of the CWA and 40 C.F.R. § 130.7. The 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. 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).

In previous guidance, the 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 the EPA's Guidance for 2006 Assessment, Listing and Reporting Requirements Pursuant to Sections 303(d), 305(b) and 314 of the Clean Water Act, July 21, 2005.) By following this guidance, Category 5 of the Integrated Report is the State's Section 303(d) list. The 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 2012/2014 Integrated Report and the 2012 and 2014 assessment attribute and geographic information system (GIS) data, were made available to the EPA Region 8 electronically on March 27, 2015 and provided by Utah DWQ on a CD with the hardcopy submittal letter. The Integrated Report from the Utah 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, 303(d) List and Monitoring and Evaluation List).
- **Prioritization of waterbodies for TMDL development** (See Appendix D, 303(d) List and Monitoring and Evaluation List).
- Identification of waters targeted for TMDL development over the next biennium (See Appendix D, 303(d) List and Monitoring and Evaluation List; H (high priorities).

The EPA's partial approval / further action pending of Utah's year 2012 and 2014 Section 303(d) lists extends only to the items listed immediately above, with the exception of Great Salt Lake and Six Mile Creek.

The EPA is taking no action at this time on Great Salt Lake, which Utah indicates has insufficient data for an assessment. The EPA is deferring action with the expectation that the deferral will be reconsidered or resolved as part of the Agency's action on Utah

DEQ's 2016 Integrated Report and 303(d) list. 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), and UT-L-16020310-004 (Farmington Bay). For the Great Salt Lake, the EPA is in the process of assembling and considering available data for this water body to determine if an assessment is possible or if we agree that there are insufficient data for an assessment.

EPA also is taking no action at this time on Six Mile Creek, which Utah indicates has insufficient data for an assessment. Specifically, EPA is deferring action on Utah DWQ assessment unit UT-16010101-002 with the expectation that this deferral will be resolved as part of the Agency's action on Utah's 2016 Integrated Report and 303(d) list. The South Fork of Six Mile Creek is a portion of that assessment unit for which there are E.coli data that EPA views as likely showing impairment of the secondary recreational use designated for the segment / assessment unit. However, although the E. coli data-set is adequate for a statistical comparison pursuant to the requirements of the State's E. coli water quality standard (5 sample minimum), it does not meet the minimum sample requirements for an analysis under Utah DWQ's current assessment methods (10 sample minimum for E. coli assessment). As a result, Utah DWQ could not conduct an assessment and has chosen not to list this water. EPA acknowledges the conflicting analytical requirements which led to Utah DWQ's decision on the South Fork Six Mile Creek, and understands that DWQ is revising its 2016 assessment methodology to address the problem. Once the conflict is resolved, EPA anticipates Utah DWQ will reassess South Fork Six Mile Creek with the revised assessment methodology in order to properly determine its condition for their 2016 Integrated Report.

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 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 2012 and 2014 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 2012 and 2014 Integrated Reports 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 2012 and 2014 Section 303(d) waterbody lists.

- 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 2012 and 2014 Section 303(d) waterbody lists.
- 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 2012 and 2014 Section 303(d) lists. 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 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 2012 and 2014 Section 303(d) lists include 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 with regards to the waters identified in the State's 2012 and 2014 Section 303(d) lists, the State's process for developing those lists 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. § 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. The 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 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 did not remove any waters

for its 2012 303(d) list. The State's removal decisions and stated justifications for its 2014 303(d) list are summarized below:

Number of Waterbody-Pollutant Combinations Removed from List	
Reason	2014
TMDL completed and approved by the EPA	13
Change in assessment methodology resulted in WQS being met	0
New data or information indicate applicable WQS is being met	27
Other	0
Total	40

In reviewing the State's 2012 and 2014 Section 303(d) waterbody lists, the EPA carefully considered Utah's decision to remove certain waterbody-pollutant combinations from the State's 2010 303(d) list, its justification from 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 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, 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 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, 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 Recommendation on Utah's 2012 and 2014 Section 303(d) List Submittal

After careful review of Utah's final Section 303(d) lists submittal package, the EPA has determined that Utah's 2012 and 2014 Section 303(d) lists partially meet the requirements of Section 303(d) of the Clean Water Act (CWA) and the EPA's implementing regulations. As a result, the EPA partially approves Utah's 2012 and 2014 Section 303(d) lists with further action 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 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.

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

December 12-13, 2011, The Record of the Rulemaking Hearing for Utah Regulation #93 (5 CCR 1002-93); the List of Water-Quality-Impaired Segments Requiring Total Maximum Daily Loads (including pre-hearing statements). Utah Water Quality Control Commission