

The EPA's Action to Add Waters to Oregon's 2010 303d List (December 2012)

I. Purpose

This document summarizes the basis for the EPA's final decision to add 870 water quality limited segments to Oregon's 2010 303(d) list.

II. Overview

Clean Water Act ("CWA") Section 303(d), 33 U.S.C. § 1313(d), ("Section 303(d)") requires states to identify those waters within their jurisdiction for which effluent limitations required by CWA Section 301(b)(1)(A) and (B), 33 U.S.C. § 1311(b)(1)(A) and (B), are not stringent enough to implement any applicable water quality standard, to establish a priority ranking for such waters, and to submit a listing of such waters to the EPA ("Section 303(d) list").

On January 31, 2011 and May 23, 2011, the Oregon Department of Environmental Quality ("ODEQ") submitted Oregon's 2010 Section 303(d) list of water quality limited segments ("WQLSs") ("Oregon's 303(d) list"), to the EPA, as part of the Integrated Report (IR) submitted by ODEQ ("submission") to meet the requirements of CWA Sections 303(d), 305(b), and 314; 33 U.S.C. § §1313(d), 1315(b), and 1324. *See* ODEQ, 2011a and ODEQ, 2011b.

On March 15, 2012, the EPA partially approved and partially disapproved Oregon's 2010 303(d) list. The EPA approved Oregon's 2010 303(d) list for the waters ODEQ identified and the limited parameters assessed during its process. The EPA determined that for the waters ODEQ identified and specific parameters it assessed, ODEQ met the requirements of 40 CFR Section 130.7(b)(5) and (6). ODEQ only assessed 1) sampling data results for Enterococci bacteria for coastal recreation waters and reports of beach advisories, 2) health advisories where toxic algae blooms have occurred in Oregon waters, 3) other advisories warning against consuming fish from certain waters, and 4) instances of public drinking water system closures due to turbidity in surface waters.

Despite comments to the contrary, the record shows that ODEQ conducted an active solicitation for data from organizations, groups and individuals during its 30-day call for available data. ODEQ evaluated data and information available in DEQ's LASAR database for the time period June 1, 1999 through May 31, 2009 for specific parameters. Data and information that met the assessment protocols for QA/QC, metadata, and pollutant-specific requirements were processed and evaluated according to assessment protocols for the parameters ODEQ assessed. The EPA notes that the additional databases the EPA considered in our assessment did not contain any additional data or information relevant to the limited parameters Oregon assessed.

In addition, LASAR describes, for each assessment record, the data and information that ODEQ reviewed and considered for use. LASAR assessment records indicate that both data from monitoring stations and information other than monitoring station data were also used for the 2010 303(d) list assessment such as fish advisories, public water supply shut down information, recreational beach closures harmful algae bloom information, and studies of pollutant effects on bald eagles in developing its list. ODEQ considered everything presented to it for the parameters it assessed. For these parameters, ODEQ did not indicate that there were any data or information ODEQ did not use.

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While the EPA agreed with ODEQ's listing process for the water quality standards which ODEQ assessed, the EPA disagreed with Oregon's decision to limit its assessment to certain parameters. Hence, on March 15, 2012, the EPA partially approved and partially disapproved Oregon's 303(d) list because Oregon's list failed to consider information on the following pollutants: ammonia, nitrates, pH, chlorophyll a, dissolved oxygen, toxics, temperature, bacteria, and sediment. The EPA's rationale for its approval and disapproval decision is documented in Enclosure 1 "Review of Oregon's 2010 Integrated Report" of the EPA's letter to ODEQ regarding its partial approval/partial disapproval of Oregon's Final 2010 303(d) List, dated March 15, 2012. *See* EPA, 2012b.

In accordance with 40 CFR § 130.7(d)(2), the EPA proposed to add 1,004 water quality limited segments to Oregon's 2010 303(d) list and issued public notice seeking comment on those listings. After review of the comments received, the EPA is adding 870 water quality limited segments to Oregon's 2010 303(d) list. *See* Attachment 1 to this document: Spreadsheet of the additional water quality segments and associated impairments to be added to Oregon's 2010 303d List, and Attachment 2: Spreadsheet of the EPA's proposed water quality limited segments and associated impairments that are not included in the EPA's final list to be added to Oregon's 2010 303d List. The EPA's detailed "Response to Comments on the EPA's Additions to Oregon's 2010 Clean Water Act 303(d) List" and associated attachments (Attachment 3 to this document) provide the EPA's basis for determining the proposed waters that should not be listed.

III. The EPA's List Development Process, Solicitation of Public Comments and Final Decision

As required by 40 CFR 130.7(d)(2), because the EPA partially disapproved Oregon's list, the EPA identified waters in the state that did not meet water quality standards. The EPA issued a public notice on March 15, 2012 and sought comment on its proposed additions through April 30, 2012. *See* 51 Fed. Reg. 15368 (March 15, 2012).

The EPA began its list development process by retrieving data from Oregon's Laboratory Analytical and Storage Retrieval (LASAR) database. LASAR is ODEQ's repository for data and information that ODEQ gathers or has gathered for it, as well as data and information submitted by partner agencies and watershed groups, and received in response to the "call for data" during the development of Oregon's 2010 303(d) list and during previous lists. LASAR provided the vast majority of relevant data for the parameters the EPA assessed; however, the EPA did not rely solely on Oregon's LASAR database for assessing its additional listings on Oregon's 303(d) list. The EPA also gathered data from the United States' Geological Survey's (USGS) National Water Information System (NWIS) and from the EPA's STORET (STOrage and RETrieval) data warehouse. The STORET Data Warehouse is a repository for water quality, biological, and physical data and is used by state environmental agencies, the EPA and other federal agencies, universities, private citizens, and many others. NWIS is repository of water- resources data (such as water quality and streamflow) collected by USGS at major rivers, lakes, and reservoirs. Examples of water-quality data collected are temperature, specific conductance, pH, nutrients, pesticides, and volatile organic compounds. For a more detailed description of sources of data and information used by the EPA, see "EPA's Review of Oregon's 2010 Integrated Report"

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(March 15, 2012), "EPA listing methodology" (March 15, 2012), "The EPA's Response to Comments," and Attachment 4: Parameters and Beneficial Uses Evaluated and Associated Databases Used by the EPA.

When determining whether to add waters to Oregon's Section 303(d) list, the EPA reviewed Oregon's current applicable water quality standards (Oregon Administrative Rules, Chapter 340, Division 41) and, in large part, Oregon's Listing Methodology. *See* ODEQ, 2011c. The EPA also referred to the listing criteria contained in the water quality assessment guidance documents issued by the EPA. *See* EPA, 2001; EPA, 2003a; EPA, 2003b; EPA, 2005; EPA, 2006; and EPA, 2009.

The EPA developed a listing methodology to use in its assessment of impaired waters to add to Oregon's 2010 303(d) list. This listing methodology was the same as Oregon's 2010 methodology for the parameters the EPA assessed with one exception. For sediment, Oregon did not have a formally established assessment methodology for 303(d) listing so the EPA developed a sedimentation listing methodology. The EPA's sedimentation listing methodology is based on Oregon's peer reviewed state wide data analysis method for clean sediment which is consistent with the EPA's "Framework for Developing Suspended and Bedded Sediments Water Quality Criteria" (EPA-822-R-06-001 Office of Water, Office of Research and Development, 2006) and on scientific literature and methodologies used by other states. The EPA used Oregon's 2010 assessment of biocriteria impairments, but listed such impaired waters in Category 5. The EPA guidance recommends listing waters with aquatic use impairments as Category 5 even if the pollutant is not known. *See* EPA, 2005. (*Also see* "Methodology for Oregon's 2010 Water Quality Report and List of Water Quality Limited Waters," ODEQ, May 12, 2011; "EPA 303(d) Listing Methodology," US EPA, March 15, 2012; and "Guidance for 2006 Assessment, Listing and Reporting Requirements Pursuant to Sections 303d, 305b and 314 of the Clean Water Act," US EPA, July 29, 2005). The EPA provided the public with its assessment methodology during the public comment period.

To support its proposed additions, the EPA produced the following information that was also available during the comment period: (1) EPA's Review of Oregon's 2010 Integrated Report; (2) EPA 303(d) Listing Methodology; (3) The EPA Proposed Additions to Oregon's 2010 303(d) List; and (4) supporting data spreadsheets that described the data and information used to identify the waters for ammonia, chlorophyll, dissolved oxygen, e coli, fecal coliform, pH, sediment, temperature, and toxics. *See* EPA, 2012b.

The EPA received comment letters from twenty-two individuals or organizations on the proposed additions to Oregon's 2010 303(d) list. The comments received included comments on the EPA proposed additions, including comments on the EPA's process and listing methodology.

The EPA has summarized the comments and provided responses in the document entitled "Response to Comments on the EPA's Additions to Oregon's 2010 Clean Water Act 303d List." *See* EPA, 2012a.

Below is a summary of the EPA's responses to the major categories of comments:

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1. ***Agreement on Removals from the EPA's Proposed Waters to Add to Oregon's 2010 303(d) List.*** Commenters noted what appeared to be errors in specific the EPA proposed listings and requested these listings be removed. These errors included duplicate listings, coding errors in Oregon Department of Environmental Quality's database which formed the basis of the EPA's listings, errors in calculating ammonia criteria, incorrect extraction from a database prior to submittal into STORET, incorrect use of PREDATOR model, listed impairments already addressed by the EPA approved TMDLs, errors in applying appropriate criteria (such as marine instead of estuarine/freshwater), problems with monitoring locations, error in waterbody type, lack of sufficient data to show impairment of a designated use, incorrect labeling of environmental data in LASAR and incorrect data evaluation. In those circumstances where such errors resulted in an erroneous proposed listing, the EPA agreed with the commenters and removed these listings. *See* Attachment 1 to the Response to Comments: Table of Proposed the EPA Listings Removed in Response to Comments and Rationale for Each Removal.
2. ***Clarifications on the EPA's Proposed Waters to Add to Oregon's 2010 303(d) List.*** Commenters pointed out errors in segment mile identification, LLID identification, waterbody name, spawning time period, and HUC identification. The EPA agreed with the commenters and corrected the errors. *See* Attachment 2 to the Response to Comments: Table on Clarifications or Corrections to the EPA's Listings.
3. ***Disagreement on the EPA's Proposed Waters to Add to Oregon's 2010 303(d) List.*** Commenters requested the EPA to remove specific waters from the EPA's proposed waters to add to Oregon's 2010 303(d) List for arsenic, biological, chlorophyll a, dissolved oxygen, e-coli, pH, guthion, chlorpyrifos, hexachlorobenzene, sedimentation, and temperature impairments. The EPA disagreed with the commenters. The EPA will not be removing these waters from the EPA's additions to Oregon's 2010 303(d) List for the reasons described in the EPA's Response to Comments, Attachment 3 hereto.
4. ***Concerns with the EPA's Listing Process.*** Commenters described concerns with the EPA's application of Oregon's new toxics water quality criteria, perceived failings of the EPA to evaluate all readily available information and data, and the EPA's listing methodology on sediments and dissolved oxygen. Commenters recommended the EPA relist waters with TMDLs based on older water quality standards, propose additional temperature listings and list toxics for media other than the water column. Commenters questioned whether the EPA evaluated impairments using all information, the antidegradation policy, narrative criteria and designated use support. For the EPA's responses, see Attachment 3.
5. ***General Concerns:*** Several commenters raised general concerns on the proposed listings. Although the comments were not linked to specific listings, the EPA responded to similar issues that were raised by other commenters in the context of specific waters that provided relevant information responsive to the general comments. A commenter requested that the EPA list additional waters for impairments due to ocean acidification and submitted numerous reports and studies. Another commenter requested the EPA add waters impaired for marine pH criteria and narrative criteria related to aquatic life designated uses for coastal waters and submitted numerous reports and studies. For the EPA's responses, see Attachment 3.

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After consideration of comments received, the EPA is adding 870 water quality limited segments and associated impairments to Oregon's 2010 Clean Water Act 303(d) List (see Attachment 1: Spreadsheet of the additional water quality segments and associated impairments to be added to Oregon's 2010 303d List and Attachment 2: Spreadsheet of the EPA's proposed water quality limited segments and associated impairments that are not included in the EPA's final list of waters and associated impairments to be added to Oregon's 2010 303d List). All 870 water quality limited segments were originally proposed.

IV. List of Attachments and References

Attachments:

Attachment 1: Spreadsheet of the EPA's final list of additional water quality segments and associated impairments to be added to Oregon's 2010 303(d) List

Attachment 2: Spreadsheet of the EPA's proposed water quality limited segments and associated impairments that are not included in the EPA's final list to be added to Oregon's 2010 303(d) List

Attachment 3: Response to Comments on the EPA's Additions to Oregon's 2010 Clean Water Act 303(d) List (December 2012)

Attachment 4: Parameters and Beneficial Uses Evaluated and Associated Databases Used by the EPA

References:

EPA, 2012a. Final List of Waters to Add to Oregon's 2010 303(d) List. Letter from Daniel D. Opalski, Director, Office of Water and Watersheds (OWW), USEPA Region 10 to Greg Aldrich, Acting Director, Oregon Department of Environmental Quality (ODEQ). Attachments include (1) EPA's Action to Add Waters to Oregon's 2010 303d List; (2) Response to Comments on EPA's Additions to Oregon's 2010 Clean Water Act 303(d) List; and (3) Final List of EPA Additions to Oregon's 2010 303(d) List, December 2012.

EPA, 2012b. Partial Approval/Partial Disapproval of Oregon's Final 2010 303(d) List. Letter from Michael A. Bussell, Director, Office of Water and Watersheds (OWW), USEPA Region 10 to Greg Aldrich, Acting Director, Oregon Department of Environmental Quality (ODEQ); attachments include (1) EPA's Review of Oregon's 2010 Integrated Report; (2) EPA 303(d) Listing Methodology; (3) EPA Proposed Additions to Oregon's 2010 303(d) List; and (4) supporting data spreadsheets that described the data and information used to identify the waters for ammonia, biological, chlorophyll, dissolved oxygen, e coli, fecal coliform, pH, sediment, temperature, and toxics. March 15, 2012.

Fed. Reg. 15368 (March 15, 2012). "Clean Water Act; Availability of List Decisions (Notice of Availability and Request for Public Comment)." Federal Register 77:51 (Thursday, March 15, 2012) p. 15368.

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ODEQ, 2011a. Final Submittal of Oregon's Section 303(d) List of Category 5 Water Quality Limited Waters Needing a TMDL. Letter from Neil Mullane, Administrator, ODEQ to Mike Bussell, USEPA; attachments include (1) Oregon's Integrated Report, (2) Methodology for Oregon's 2010 Water Quality Report and List of Water Quality Limited Waters; (3) Response to Comments on Final Supplement to Oregon's 2010 Integrated Report and (4) Oregon's TMDL Priorities and Schedule; January 31, 2011.

ODEQ, 2011b. Final Submittal of Oregon's Section 303(d) List of Category 5 Water Quality Limited Waters Needing a TMDL. Letter from Neil Mullane, Administrator, ODEQ to Mike Bussell, USEPA; attachments include (1) Oregon's Integrated Report, (2) Methodology for Oregon's 2010 Water Quality Report and List of Water Quality Limited Waters; (3) Response to Comments on Final Supplement to Oregon's 2010 Integrated Report and (4) Oregon's TMDL Priorities and Schedule; May 23, 2011.

ODEQ, 2011c. Methodology for Oregon's 2010 Water Quality Report And List of Water Quality Limited Waters (Pursuant to Clean Water Act Sections 303(d) and 305(b) and OAR 340-041-0046). Oregon Department of Environmental Quality; May 12, 2011.

ODEQ, 2010, Application of DO Criteria to "Salmon and Trout Rearing and Migration" Beneficial Use and "Redband or Lahontan Cutthroat Trout" Beneficial Use. Memorandum from Marilyn Fonseca, Community and Program Assistance, Oregon DEQ to Water Quality Program Staff and Managers, June 8, 2010.

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

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

EPA, 2005. Guidance for 2006 Assessment, Listing, and Reporting Requirements Pursuant to Sections 303(d), 305(b), and 314 of the Clean Water Act. Diane Regas, Director, Office of Wetlands, Oceans and Watersheds, July 29, 2005.

ODEQ, 2004. Oregon Responses to EPA Questions re: the State's Water Quality Temperature Standards. Memorandum from Michael Llewelyn, Director of Water Quality Division, Oregon DEQ to Randy Smith, Office of Water Director, Region 10 EPA, February 4, 2004.

EPA, 2003a. Guidance for 2004 Assessment, Listing and Reporting Requirements Pursuant to Sections 303(d) and 305(b) of the Clean Water Act. Diane Regas, Director Office of Wetlands, Oceans and Watersheds, USEPA to Regional Water Division Directors, July 21, 2003.

EPA, 2003b. EPA Region 10 Guidance for Pacific Northwest State and Tribal Temperature Water Quality Standards. EPA 910-B-03-002. Region 10 Office of Water, Seattle, WA. 2003.

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EPA, 2001. 2002 Integrated Water Quality Monitoring and Assessment Report Guidance, Robert H. Wayland III, Director, Office of Wetlands, Oceans and Watersheds, November 19, 2001.

ODEQ, 1998. Oregon's Interpretations of its Water Quality Standards Pertaining to Beneficial Uses, Numeric Criteria and Implementation Issues. Memorandum from Michael Llewelyn, Director of Water Quality Division, Oregon DEQ to Phil Millam, Office of Water Director, Region 10 EPA, June 22, 1998, <http://www.deq.state.or.us/wq/standards/docs/EPAletter06-22-1998.pdf>

EPA, 1991. Guidance for Water Quality Based Decisions: The TMDL Process. EPA 440/491-001 U.S. Environmental Protection Agency, Office of Water, Washington, DC.

Fed. Reg. 33040, 33044-33045 (July 24, 1992). "Surface Water Toxics Control Program and Water Quality Planning and Management Program (Final Rule)." Federal Register 57:143 (July 24, 1992) pgs. 33040, 33044-33045.

Oregon. Water Quality Standards, Beneficial Uses, Policies, and Criteria for Oregon: Oregon Administrative Rules Chapter 340 Division 41.
http://arcweb.sos.state.or.us/pages/rules/oars_300/oar_340/340_041.html