

Purpose

The Environmental Protection Agency (EPA) has conducted a complete review of Idaho's 2008 Section 303(d)¹ list and supporting documentation and information. Based on our review of the submittal, EPA has determined that Idaho's 2008 list of 929 assessment units (AU) still requiring TMDLs meets the requirements of Section 303(d) of the Clean Water Act (CWA) and EPA's implementing regulations. Therefore, by EPA's final action letter, EPA partially approved and partially disapproved Idaho's 2008 303(d) list. Specifically, EPA approved the State's decision to list the 929 AUs and associated pollutants identified on the 303(d) list. However, EPA disapproved the State's decision not to list 2 additional water bodies because EPA found that these waters and pollutants meet the federal requirements for listing under Section 303(d). The statutory and regulatory requirements of CWA Section 303(d), and EPA's review of Idaho's compliance with each requirement, are described in the attached analysis.

Statutory and Regulatory Background

I. Identification of Water Quality Limited Segments (WQLS) for Inclusion on Section 303(d) List

Section 303(d)(1) of the Clean Water Act (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 achieve 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 Act, (2) more stringent effluent limitations required by federal, State or local authority, and (3) other pollution control requirements required by State, local, or federal authority. See 40 CFR 130.7(b)(1).

II. 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 partially meeting or not meeting designated uses, or as threatened, in the State's most recent 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

¹ The 303(d) List is also known as Category 5 of the Integrated Report.

identified as impaired or threatened in any Section 319 nonpoint assessment submitted to EPA. See 40 CFR 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 EPA 1991, Appendix C. While States are required to evaluate all existing and readily available water quality-related data and information, States may decide not to use 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 CFR 130.7(b)(6) require States to include as part of their submissions to EPA documentation to support decisions to list or not list waters. Such documentation must 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) a rationale for any decision to not use any existing and readily available data and information and (4) any other reasonable information requested by the Region.

III. Priority Ranking

EPA regulations also codify and interpret the requirement in Section 303(d)(1)(A) of the Act that States establish a priority ranking for listed waters. The regulations at 40 CFR 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. See Section 303(d)(1)(A). As long as these factors are taken into account, the Act provides that States establish priorities. States may consider other factors relevant to prioritizing waters for TMDL development, including immediate programmatic needs, 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 1991.

Analysis of Idaho's Submission

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

EPA has reviewed the State's submission, and has concluded, with the exception of the Lower Boise River and Hem Creek, that the State developed its Section 303(d) list in compliance with Section 303(d) of the Act and 40 CFR 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.

A. Idaho's List Development Process

Idaho's 2002 303(d) list was used as a starting point for developing the 2008 303(d) list. The Idaho Department of Environmental Quality (IDEQ) actively sought data collected by federal agencies (including the U.S. Geological Society, U.S. Forest Service and the Bureau of Land Management), state agencies (including Idaho Department of Fish and Wildlife), tribes, local governments, watershed councils and private and public organizations and individuals. Idaho solicited public comment on its draft 303(d) list and Integrated Report.

IDEQ prepared a final list of impaired waters using data they collected and data received during the public processes. IDEQ categorized the data into three tiers of scientific rigor with more weight given to data with a higher level of scientific rigor. The scientific rigor is explained in the state's listing methodology, Water Body Assessment Guidance, Second Edition, Final January 2002 (WBAG II). IDEQ communicated its three tier collection methods with requirements to the public in the draft and final list methodology, which were available in hard copy and on the internet.

IDEQ submitted their final 2008 303(d) list, including a response to public comment, a final list methodology, a priority ranking and an Integrated Report on the Status of Idaho's waters, to EPA on July 14, 2008. EPA received Idaho's 303(d) list as a hard copy on July 16, 2008. During EPA's review of Idaho's final submittal a number of questions arose regarding the information Idaho provided. EPA communicated regularly with Idaho and received additional information from Idaho to support listing decisions on the following dates: August 5, August 8, September 8, September 9, September 11, September 12, September 24, September 26, October 22 and October 23, 2008.

An online mapping database is also available online at:
<http://global.deq.idaho.gov/Website/wq2004/run.htm>

B. Public Participation

For the 2008 303(d) list, Idaho solicited data and comments until February 20, 2008, seeking technical information and data on the conditions of Idaho's surface waters. Data received during the "call for data" period and data collection by IDEQ were used to develop the draft Integrated Report (IR) and 303(d) lists. The draft 2008 IR 303(d) list and list methodology were released for public review from January 10 to February 20, 2008 to provide the public an opportunity to look at and comment on the IR, including the draft 303(d) list. The summary document includes an index of people and organizations who provided comments, a table of comments and IDEQ's specific response to each commenter. Idaho received 25 written comment letters from individuals and organizations.

C. EPA's Review Process

Enclosure 1: EPA review of Idaho's 2008 Integrated Report

EPA received Idaho's Final 2008 303(d) list as a hard copy on July 16, 2008. EPA also reviewed both an on-line version of IDEQ's database, which has a mapping tool, available via Internet at: <http://global.deq.idaho.gov/Website/wq2004/run.htm>, and the electronic copy of the Assessment Database (ADB) of the 303(d) list provided in CD format. The final 2008 303(d) list submittal included the following supporting documentation: Integrated Report (Categories 1-5), the 2008 Principles and Policies document which includes Idaho's listing methodology, a summary of public comments with IDEQ's response to the comments, and priority ranking and targeting. The Integrated Report identifies the information that was considered and what actions were taken. IDEQ provided a hard copy spreadsheet of all the water bodies that were de-listed during this cycle of the 303(d) list to make it possible to compare changes between the 2002 and 2008 lists.

EPA reviewed IDEQ's electronic copy of the database to determine which waters had been added to or removed from Idaho's final 2008 303(d) list. IDEQ's electronic version was a complete download of their ADB that is accessible to view on Microsoft's Access software. This download provided a snapshot of the assessed data which is currently known as the final 2008 Integrated Report. This electronic database allows tremendous accessibility to supporting data and records for individual water bodies. EPA extensively reviewed Idaho's draft and final 2008 303(d) lists. In addition, EPA communicated regularly with IDEQ and developed an administrative record that includes the draft and final 303(d) list, final list methodologies, prioritization schedule, public notices, e-mails and matrix showing changes between the 2002 list and 2008 lists. IDEQ has provided descriptions of the data and information considered. During EPA's review of Idaho's final submittal a number of questions arose regarding the information Idaho provided. EPA communicated regularly with Idaho and received additional information from Idaho to support listing decisions on the following dates: August 5, August 8, September 8, September 9, September 11, September 12, September 24, September 26, October 22 and October 23, 2008.

With the exception of the Lower Boise River and Hem Creek, EPA concluded that the State properly assembled and reasonably evaluated all existing and readily available data and information, including data and information relating to the categories of waters specified in 40 CFR 130.7(b)(5). The State provided to EPA its rationale for not using particular existing and readily available water quality-related data and information as a basis for listing waters.

Please see Enclosures 2 and 3 for EPA's basis for disapproval of Idaho's delisting of the Lower Boise River and Hem Creek. In both cases, EPA found that Idaho did not consider all readily available data and information when making their listing decision.

II. Consideration of Existing and Readily Available Water Quality-Related Data and Information

There are 929 AU pollutant combinations on the 2008 303(d) list. The state has demonstrated good cause for not including the previously listed AU pollutant

Enclosure 1: EPA review of Idaho's 2008 Integrated Report

combination discussed below on its 2008 303(d) list. As provided in 40 CFR 130.7(b)(6)(iv), EPA requested that the State demonstrate good cause for not including these waters.

A. Waters not required to be listed

1. Waters not listed due to water quality standards attainment. IDEQ removed a total of 381 (Idaho reported 383, but that included the Lower Boise River and Hem Creek which EPA is disapproving) assessment units paired with a pollutant because information shows they were meeting applicable water quality standards. Three hundred and seventy three of the AU pollutant combinations were removed from the list because additional data showed they met water quality standards. Four of the AU pollutant combinations meet water quality standards because Idaho utilized a new assessment method and four others meet standards because the original basis for the listing was incorrect. The remainder of the waters, EPA has determined that IDEQ's removal of these waters from Idaho's Section 303(d) list is consistent with the requirements of Section 303(d) of the Act and 40 CFR 130.7.

2. Waters not listed due to TMDL approved. For the 2008 list cycle, IDEQ removed 1,486 assessment units from the 303(d) list based on EPA approval of TMDLs for these waters. These assessment units were placed in Category 4A, TMDLs Approved, of the Integrated Report. Under EPA regulations at 40 CFR 130.7, the 303(d) list is an inventory of water bodies impaired by pollutants and requiring a TMDL. Thus, EPA has determined that IDEQ's removal from the 303(d) list of the 1,486 assessment units with an EPA approved TMDL meet the requirements of CWA Section 303(d).

B. An Analysis of Waters Removed from Idaho's 2008 303(d) list

1. Waters Removed from the 303(d) list due to Flaws in the Original Analysis
Consistent with 40 CFR 130.7(b)(6)(iv), EPA concluded that IDEQ provided "good cause" for the decisions to remove 57 AU pollutant combinations. An aspect of good cause is a "flaw in the original analysis that leads to the water being listed in the categories at 130.7(b)(5)." Idaho removed these water segments paired with a pollutant from the 303(d) list because the original listing was in error. The errors in listing are due because the original listing was in error. The errors in listing are due to technical listing errors, such as accidental comparison to incorrect criteria, sampling error and duplicate records. Therefore, EPA has determined that the delisting of these 57 waters is consistent with the requirements of 40 CFR 130.7(b)(6).

2. Water not listed because waters not in state's jurisdiction. Idaho has identified 3 AU pollutant combinations that are being delisted because they are wholly contained within Indian Reservations and not within the state's jurisdiction. EPA has determined that these delistings are consistent with the requirements of 40 CFR 130.7(b)(6).

C. Basis for Decision to Add Waters to Idaho's 2008 303(d) list

Enclosure 1: EPA review of Idaho's 2008 Integrated Report

1. Water not listed that EPA has determined do not meet the requirements of 40 CFR 130.7.

Idaho has identified 2 waters, the Lower Boise River and Hem Creek that were removed from the 303(d) list because the applicable water quality standards are attained. However, EPA has disapproved these delisting based on our analysis of all readily available data and information which show the waters remain impaired.

A. Lower Boise River

EPA has reviewed Idaho's good cause rationale for delisting the Lower Boise River. In making its assessment, IDEQ focused on a few of the indicators of nutrient impairment while ignoring other parameters which are equally critical to assessing nutrient impairment. EPA concluded that IDEQ did not demonstrate good cause to delist the Lower Boise River for nutrients, and that IDEQ provided insufficient rationale to justify the exclusion of all existing and readily available data. While dissolved oxygen(DO), pH and planktonic chlorophyll-a are useful indicators of nutrient impairment, they do not provide sufficient rationale to exclude data on other key water quality parameters: total phosphorus, periphytic chlorophyll-a and macroinvertebrate data. While EPA 304(a) criteria are not legally binding, they are a valid basis to interpret state narrative standards. Total phosphorus, periphytic chlorophyll-a and macroinvertebrate data clearly indicate that the Lower Boise River is impaired for nutrients.

Data presented by IDEQ on DO, pH and planktonic chlorophyll-a do not demonstrate good cause to delist the Lower Boise for nutrients. The indicators IDEQ selected to make a delisting decision when considered in combination with other indicators are in fact supportive of the conclusion that the Lower Boise is impaired. DO grab samples show supersaturated levels indicative of higher than normal algal activity. Additionally, a 2004 USGS report shows an exceedance of pH at Middleton on the Lower Boise River of 9.1 (MacCoy, 2004). Information presented by IDEQ on nuisance algae reports is at least seven years old, and IDEQ does not consider more recent information on nuisance algae complaints. Recent photo logs show that algae are present. IDEQ's conclusions on scouring do not reconcile with field observations and data.

These water quality data discussed above and the water quality data which were excluded by IDEQ demonstrate that the Lower Boise River should not be delisted for nutrients from Idaho's 303(d) list. Based on EPA's review of the information and documentation provided by IDEQ, as well as the readily available data, IDEQ has not demonstrated good cause or sufficient rationale to exclude readily and existing information to support the delisting of nutrients from the Lower Boise River. The state has failed to demonstrate that the Lower Boise is meeting the state's water quality standards for nutrients. A more detailed analysis is in Enclosure 2.

B. Hem Creek

EPA evaluated the rationale provided by IDEQ for de-listing Hem Creek for temperature and concluded that the rationale provided by IDEQ does not support the conclusion that

Hem Creek stream temperatures are natural. Based on our review it also appears that de-listing of Hem Creek for temperature is not consistent with IDEQ listing policies as provided in the Final Department of Environmental Quality Working Principles and Policies for the 303(d)/305(b) (IDEQ, 2008b).

Idaho presented the following five lines of evidence in its Final 303(d) list to support its proposal to de-list Hem Creek for temperature: 1) Hem Creek has the least temperature criteria exceedances of any stream in the Upper North Fork Clearwater River (UNFCR) subbasin., 2) only a small amount of logging has occurred in the watershed, and no shade was removed from the Stream Protection Zone, 3) biological scores were very high in sampling conducted in Hem Creek, 4) The Clearwater National Forest Recommended Hem Creek as a reference stream for BURP monitoring, and 5) INFISH applies and is equivalent to meeting a natural vegetation canopy cover, since it results in "no entry" 300' stream setbacks. EPA reviewed IDEQ's de-listing rationale in the context of "good cause" provisions for de-listing established under 40 CFR 130.7(b)(6)(iv). Our review has concluded that that state failed to demonstrate good cause to remove this water from the 303(d) list. A more detailed analysis of this review is in Enclosure 3.

III. Priority Ranking and Targeting

EPA also reviewed the State's priority ranking of listed waters for TMDL development as per 40 CFR 130.7(b)(4), which requires that states "shall include a priority ranking for all listed water quality limited segments still requiring TMDLs," and concludes that the State properly took into account the severity of pollution and the uses to be made of such waters. EPA reviewed the State's identification of WQLSs targeted for TMDL development in the next two years, and concluded that the targeted waters are appropriate for TMDL development in this time frame. 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 Section 303(d)(1)(A). As long as these factors are taken into account, the Act provides that States establish priorities.