

2017 Triennial Review of Idaho Water Quality Standards



**State of Idaho
Department of Environmental Quality**

November 2017

Cover photo: Salmon River Canyon near Mackay Bar, Idaho. Photo by Jason Pappani



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November 2017



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Table of Contents

1	Background.....	1
2	Public Involvement.....	1
2.1	Public Workshops.....	1
2.1.1	Issues Identified by DEQ.....	2
2.1.2	Summary of Workshop Comments Received.....	4
2.2	Public Comment to Draft Report.....	4
2.2.1	Summary of Comments Received	4
3	Water Quality Standards Priorities	4
3.1	High Priority	5
3.2	Medium Priority	5
3.3	Low Priority.....	5
	Appendix A. Public Workshop Attendee Lists.....	6
	Appendix B. Summary of Comments Received.....	10

List of Tables

Table 1.	Date and location of triennial review public workshops.	1
Table 2.	Summary of water quality standards issue papers published by DEQ.	3

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1 Background

Section 303 of the Clean Water Act requires states to modify and improve their water quality standards (WQS) at least once every 3 years. Under this triennial review process, states are to review, and modify and adopt as appropriate, applicable WQS, taking into consideration public concerns, US Environmental Protection Agency (EPA) guidance, and new scientific and technical information.

The Clean Water Act requires states to adopt EPA's recommended criteria or develop their own and routinely review and update WQS to ensure consistency with the requirements of the act. Specifically, §303(c)(1) states the "...State shall from time to time (but at least once each three year period...) hold public hearings for the purpose of reviewing applicable water quality standards and, as appropriate, modifying and adopting standards." This public review period is referred to as the triennial review.

The goal the 2017 triennial review was to meet CWA requirements by engaging stakeholders and identifying priorities for WQS rulemaking and sub-program development for the next 3+ years.

DEQ provided opportunities for public participation by hosting three workshops and publishing six water quality standards issue papers for public review.

2 Public Involvement

DEQ provided opportunities for public participation by hosting three workshops and publishing six water quality standards issue papers for public review.

2.1 Public Workshops

DEQ hosted three public workshops to communicate triennial review requirements, propose issues for prioritization, and solicit feedback from stakeholders. Dates and locations of public workshops are presented in Table 1.

Table 1. Date and location of triennial review public workshops.

Date	Location
April 11, 2017	DEQ State Office, Boise, Idaho
April 18, 2017	DEQ Pocatello Regional Office, Pocatello, Idaho
May 2, 2017	DEQ Coeur d'Alene Regional Office, Coeur d'Alene, Idaho

DEQ presented the same material at all three meetings. The information presented is available at <http://www.deq.idaho.gov/media/60179898/triennial-review-presentation-0417.pdf>.

The Boise workshop was held on April 11, 2017. There was very little discussion from the Boise meeting, with most comments focused on clarifications regarding what was presented and some

concern about how new FDA regulations for *E. coli* in agricultural waters would affect water quality standards.

The Pocatello workshop was held on April 18, 2017. Most discussion at the Pocatello meeting was aimed at issue paper #1 (Modified Aquatic Life Use for Undesignated Waters). Participants expressed their concern that this should not be a priority for the agency, and that we should instead first focus on designating natural streams and waters before attempting to apply any standards to manmade waters.

The Coeur d'Alene workshop was held on May 2. Most discussion at the Coeur d'Alene meeting was focused on use designation for Salmonid Spawning. Participants expressed concern that whatever scale we attempted to designate at would be inappropriate and that it may conflict with Idaho Department of Lands designations of Class I and Class II streams.

Lists of attendees of the three meetings can be found in Appendix A.

2.1.1 Issues Identified by DEQ

DEQ identified six water quality standards issues and developed white papers and workshop presentations discussing these issues. Issue papers are available at <http://www.deq.idaho.gov/water-quality/surface-water/standards/triennial-review/>.

A summary of each issue paper is provided in Table 2.

Table 2. Summary of water quality standards issue papers published by DEQ.

Subject	Summary of Issue Paper
#1. Modified Aquatic Life Use for Undesignated Water	The practice of applying presumed use protections for cold water aquatic life to man-made waterways is contrary to Idaho's interpretation of Idaho Water Quality Standards. Our intent is to use existing tools within the Idaho water quality standards to provide a more appropriate designated beneficial use for these unique water bodies while still meeting the requirements of the CWA. Clarification of man-made waterways should also help promote consistency in NPDES permits
#2. Salmonid Spawning Use Designation	DEQ needs to review use designations for salmonid spawning (SS) across the state as a prerequisite to updating the SS temperature criterion from 13 °C or less with a maximum daily average of no greater than 9 °C, to a single criterion of 13 °C for a 7-day average. Designating appropriate waters and updating criteria would benefit both the resource and those activities affected by water quality criteria.
#3. Recreational Use and Criteria	Since there is no difference in the geometric mean bacteria criteria or the toxics criteria applicable to primary and secondary contact recreation uses, there seems to be no value in maintaining a distinction between primary and secondary contact recreation. Collapsing the use to just recreation could save some confusion and debate and simplify future monitoring and assessment. Idaho would consider EPA's 2012 bacteria recommendations when moving forward with updates to criteria to protect recreational use.
#4. Comparison of Idaho Aquatic Life Criteria for Certain Toxic Substances with Current EPA §304(a) Recommended Criteria	Currently, Idaho does not have aquatic life criteria for acrolein, carbaryl, and diazinon, although EPA has issued new recommended aquatic life criteria for these toxics. Further, Idaho has not yet addressed guidance from EPA's most recent revised recommended criteria on ammonia, cadmium, and selenium.
#5. Cold Water Aquatic Life Criteria for Turbidity	DEQ is considering adding temporary allowances for short-term exceedance of the numeric criteria for turbidity caused by construction activities designed to improve water quality or aquatic and riparian habitats.
#6. EPA Review and Approval of State Water Quality Standards ("Alaska Rule")	To avoid confusion over which standards are EPA approved and applicable for Clean Water Act purposes, DEQ is considering rulemaking to clarify how 40 CFR 131.21 affects Idaho WQS and to identify standards for which EPA action is still pending.

Other issues identified during the triennial review process that were not captured in an issue paper include:

- Development of a performance-based approach for temperature criteria
- Designation of cold water aquatic life for waters where it is an existing use
- Designation of an appropriate aquatic life use for Jacks Creek in the Bruneau subbasin
- Update dissolved oxygen criteria for aquatic life
- Low flow design conditions used for developing water quality based effluent limits for non-toxic pollutants (e.g., nutrients, *E. coli*)

2.1.2 Summary of Workshop Comments Received

DEQ solicited written comments to materials presented at the workshops, published issue papers, and other water quality standards issues. The written comment period deadline was June 30, 2017. DEQ received comments 10 comment letters. The complete letters are available at <http://www.deq.idaho.gov/water-quality/surface-water/standards/triennial-review/>, and are summarized in Appendix B.

2.2 Public Comment to Draft Report

In addition to the three public workshops, DEQ also solicited written comments to a draft triennial review report. The draft report was posted to DEQ's web site on September 14, 2017. The written comment period deadline was October 16, 2017. DEQ received two comment letters. The complete comment letters are available at <http://www.deq.idaho.gov/water-quality/surface-water/standards/triennial-review/>.

2.2.1 Summary of Comments Received

The National Marine Fisheries Service requested that DEQ consider removal of the low-end hardness floor for hardness dependent toxics criteria and that DEQ include development of mercury and arsenic aquatic life criteria as medium priorities.

DEQ does not intend to initiate rulemaking to remove the low-end hardness floor for hardness dependent criteria; we believe that implementation of other aspects of Idaho Water Quality Standards (IDAPA 58.01.02) such as specific mixing zone requirements (58.01.02.060) and low flow design conditions to be used for development of water quality based effluent limits (58.01.02.200.03.b), provides the necessary protection of aquatic life.

Similarly, DEQ does not intend to develop new aquatic life criteria for mercury and arsenic. Once EPA revises their recommended 304(a) aquatic life criteria for mercury and arsenic DEQ will consider those recommendations. Until updates to EPA's 304(a) guidance are finalized, DEQ cannot prioritize their adoption into Idaho water quality standards

Potlatch Corporation suggested that DEQ remove designation of Salmonid Spawning use designation from the list of medium priority actions and engage stakeholders to develop materials and supporting analysis prior to initiating negotiated rulemaking.

DEQ believes that development of materials and supporting analysis can best be achieved through the negotiated rulemaking process, and intend to engage all interested stakeholders during that process.

DEQ did not make any changes to the Water Quality Standards Priorities (see Section 3) as a result of these comments.

3 Water Quality Standards Priorities

Based on comments received, DEQ proposes the following priorities for updates to Idaho Water Quality Standards.

3.1 High Priority

DEQ intends to address the following high priority items in 2018:

- Initiate rulemaking to update recreational use and criteria and consider EPA's 2012 recommended criteria
- Initiate rulemaking to update aquatic life criteria for the following toxics with new or revised EPA recommended criteria: acrolein, carbaryl, and diazinon
- Initiate rulemaking to update aquatic life criteria for ammonia
- Initiate rulemaking to develop a performance-based approach for deriving site-specific temperature criteria
- Initiate rulemaking to designate appropriate aquatic life uses for Jacks Creek in the Bruneau subbasin

3.2 Medium Priority

DEQ intends to address the following medium priority items in 2019:

- Initiate rulemaking to designate modified aquatic life use for single undesignated water and develop appropriate site specific criteria. This effort, if successful, will serve as a model for additional designations
- Initiate rulemaking to designate SS for a single water body where SS is a documented existing use. This effort, if successful, will serve as a model for additional designations
- Initiate rulemaking to designate cold water aquatic life for a single water body where cold water aquatic life is an existing use. This effort, if successful, will serve as a model for additional designations
- Initiate rulemaking to determine appropriate low flow conditions for developing water quality based effluent limits for non-toxic pollutants

3.3 Low Priority

The following issues are considered low priority and will not be addressed until 2020 and beyond:

- Revise cold water aquatic life criteria for turbidity
- Update aquatic life criteria for dissolved oxygen
- Update human health criteria for arsenic

Appendix A. Public Workshop Attendee Lists

Boise Workshop Attendees

April 11, 2017

DEQ State Office, Boise, Idaho

Name	Affiliation
Curtis Cooper	Idaho State Department of Agriculture
Mark Cecchini-Beaver	Office of the Attorney General / DEQ
Clint Dolsby	City of Meridian
Shelly Davis	Barker, Rosholt, and Simpson
Ralph Myers	Idaho Power
Brenda Tominaga	Idaho Water Policy Group
Bruce Smith	
Cyndi Grafe	US EPA
Jason Korn	City of Meridian
Paul Arrington	Idaho Water Users Association
Zahraa Alwazzan	Boise State University
Braden Jensen	Idaho Farm Bureau
Norm Semanko	Moffatt Thomas
Paula Wilson	DEQ
Don Essig	DEQ
Jason Pappani	DEQ
Stephanie Jenkins	DEQ
Ian Wigger	DEQ
Brian Reese	DEQ
Kevin Greenleaf (phone participant)	Kootenai Tribe
Robbin Finch (phone participant)	Association of Idaho Cities, City of Boise
Johanna Bell (phone participant)	Association of Idaho Cities
Loren Franklin	KC Harvey Environmental
Lisa Macchio	US EPA

Pocatello Workshop Attendees

April 18, 2017

DEQ Pocatello Regional Office, Pocatello, Idaho

Name	Affiliation
Shawn Tischenforf	Falls Irrigation District
Heather Rice	Aberdeen-Springfield Canal Company
Ray Ellis	City of Ammon
Jason Maughan	Monsanto
Jason Pappani	DEQ
Ian Wigger	DEQ
Stephanie Jenkins	DEQ
Brian Reese	DEQ
Molly Prickett	Monsanto
Steve Howser	Aberdeen-Springfield Canal Company

Coeur d'Alene Workshop Attendees

May 2, 2017

DEQ Coeur d'Alene Regional Office, Coeur d'Alene, Idaho

Name	Affiliation
Chris Tretter	Idaho Department of Lands
Gretchen Lech	Hancock Forest Management
Craig Nelson	DEQ
Mark Solomon	Idaho Water Resources Research Institute
Thomas Herron	DEQ
Bob Steed	DEQ
Jason Pappani	DEQ
Ian Wigger	DEQ
Stephanie Jenkins	DEQ
Brian Reese	DEQ
Austin Hopkins	Idaho Conservation League

Appendix B. Summary of Comments Received

2017 Triennial Review Response to Comments Received

- Commenter 1 – Association of Idaho Cities (AIC)
 Commenter 2 – City of Moscow (COM)
 Commenter 3 – City of Boise (COB)
 Commenter 4 – City of Nampa (CON)
 Commenter 5 – U.S. Environmental Protection Agency (EPA)
 Commenter 6 – Hancock Forest Management (HFM)
 Commenter 7 – Idaho Conservation League (ICL)
 Commenter 8 – Idaho Department of Lands (IDL)
 Commenter 9 – Idaho Water Users Association, Inc. (IWUA)
 Commenter 10 – Potlatch Corporation (POT)

Rule Section/Subject Matter	Commenter	Comment	Response
Modified Aquatic Life Use for Undesignated Waters	1, 3, 4	Support effort to clarify water quality goals for undesignated man-made waters through creation of a new beneficial use category specific to man-made waters or use of the modified aquatic life use category.	DEQ will test the concept by initiating rulemaking to designate modified aquatic life use for single undesignated jurisdictional water and develop appropriate site specific criteria. This effort, if successful, will serve as a model for additional designations.
Modified Aquatic Life Use for Undesignated Waters	7	Request additional detail on what criteria will be used to determine the designation and what water quality criteria would be adopted; request DEQ provide these details and solicit comments from the public on adequacy of this approach.	<p>The purpose of the triennial review is to identify and prioritize issues that need to be addressed, but not to provide specific remedies to the issues discussed. Specific remedies are properly addressed in negotiated rulemaking.</p> <p>DEQ believes that the level of detail and review requested is appropriately addresses through the negotiated rulemaking process and is therefore outside the scope of this triennial review.</p>
Modified Aquatic Life Use for Undesignated Waters	9	Do not support effort to designate man-made waters; state that regulations limit DEQ's authority to designate manmade waters to the "use for which they were developed." Since the Facilities discussed herein were "developed" for water delivery and drainage for Idaho's agriculture economy – and not for fishing, swimming, recreation, etc. – the regulations would not permit any additional use designations, such as modified aquatic	<p>While Idaho WQS do state that manmade waters are to be protected for the use for which they were developed, the Clean Water Act and Federal Regulations do require that all jurisdictional waters be protected for aquatic life and recreation uses.</p> <p>In the absence of a designated aquatic life use, DEQ is required to apply the presumed use protection of cold water aquatic life criteria to these Jurisdictional waters.</p>

Rule Section/Subject Matter	Commenter	Comment	Response
		life use.	
Salmonid Spawning Use	1	Support use designation as a medium priority.	Thank you for your comment. DEQ intends to test the concept by initiating rulemaking to designate Salmonid Spawning (SS) for a single water body where SS is a documented existing use. This effort, if successful, will serve as a model for additional designations.
Salmonid Spawning Use	6, 8, 10	Support revising criteria but do not support use of geo-referencing (maps) in rule to identify waters where use applies	Use designations require geo-referencing to determine where to apply specific criteria. Currently, DEQ designates uses at the WBID level, a very coarse level that would include all reaches within a WBID regardless of use support status or existing use status. The use of a map is intended to further refine locations within a WBID where the use and criteria would apply.
Salmonid Spawning Use	8	Any static map used to identify waters where SS applies may misrepresent the distribution of self-sustaining salmonid populations in Idaho, especially populations of West Slope Cutthroat Trout.	Use designations are not intended to identify only where uses are currently supported. This comment seems to suggest that the use and applicable criteria should only apply where the use is currently fully supported, and is inconsistent with the goals and requirements of the CWA.
Recreational Water Quality Criteria	1, 5	Support updating the criterion.	DEQ intends to initiate rulemaking to update recreational use definitions and to update the criteria.
Recreational Use Criteria	7	Support updating to EPA's recommended criterion; use of 32/1000 user illness rate.	DEQ believes that identification of appropriate illness rates for basing revised criteria should be discussed in negotiated rulemaking and not predetermined as part of the triennial review.
Aquatic Life Criteria for Toxic Substances	1, 5	Support adoption and revision of criteria with new or revised EPA 304(a) recommendations.	DEQ intends to initiate rulemaking to update toxics criteria to EPA's 304(a) recommendations for Acrolein, Carbaryl, and Diazinon as a medium priority, and will consider whether updating cadmium criteria is warranted. DEQ is currently engaged in negotiated rulemaking to update Selenium criterion (Rule Docket No. 58-0102-1701).
Aquatic Life Criteria for Toxic Substances – Ammonia	3	Support revision as a high priority, encourage DEQ to evaluate presence of Unionidae mussels and use recalculation and appendix N of EPA criteria document to establish state-specific or site specific criteria.	DEQ intends to initiate rulemaking to update ammonia criteria for aquatic life as a high priority. Details on recalculation of criteria or modification of EPA recommended criteria are outside the scope of the triennial review and should be considered through the negotiated rulemaking process.
Cold Water Aquatic Life Short Term Turbidity Exceedance Language	1	Support as a medium priority	DEQ set this Triennial review action as low priority, and will address concerns regarding short-term exceedances of turbidity through the issuance of short term activity exemptions, where appropriate, or through conditions of section 401 certifications.
Cold Water Aquatic Life Short Term Turbidity Exceedance Language	7	Do not support, believe timing of construction and installation of BMPs should prevent	DEQ set this Triennial review action as low priority, and will address concerns regarding short-term exceedances of turbidity through the issuance of short term activity exemptions, where appropriate, or through conditions of section 401

Rule Section/Subject Matter	Commenter	Comment	Response
		exceedances	certifications.
Alaska Rule	1	Supports the development of a clarification of the applicable water quality standards in Idaho; suggests that this issue be addressed in the existing Idaho/EPA Performance Partnership Agreement.	DEQ has initiated rulemaking to implement this clarification under Docket No. 58-0102-1702.
Arsenic	1	AIC supports a statewide approach for the new arsenic criteria and implementation measures for Idaho NPDES and IPDES permits as a high priority – year 1.	DEQ believes that the prudent course for updating arsenic criteria is to wait until EPA has revised and finalized a new 304(a) recommended criterion for arsenic. Implementation procedures for current As criteria are outside the scope of the triennial review.
Performance based approach to deriving temperature criteria	2	The City of Moscow would like Idaho DEQ to evaluate the development of a performance based approach to deriving temperature criteria into the Idaho WQS (directly or by reference).	DEQ intends to explore development of performance based temperature criteria and initiate negotiated rulemaking as a medium priority.
Natural Background Conditions guidance	4	The City strongly supports development of a Natural Background Conditions guidance document. For Indian Creek in Nampa, this will be a critical document in determining natural temperature and flow parameters.	DEQ is in the process of updating this guidance document; however, this document, and guidance development in general, are outside the scope of the triennial review.
General	5	In 2015, the EPA's final rule revising the federal water quality standards regulations at 40 CFR 131 was published in the federal register. Given revision of a number of water quality standards regulatory requirements EPA strongly encourages DEQ to use the triennial review process to review these new/revised requirements and if necessary update any of Idaho's water quality standards regulations that are inconsistent with the EPA's revised federal water quality standards regulations. The EPA looks forward to working with DEQ to identify any revisions that maybe necessary to ensure that Idaho's water quality standards are consistent with the revised federal rule.	DEQ believes that current WQS are consistent with current Federal Regulations.