



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 10

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OFFICE OF
WATER AND
WATERSHEDS

Ms. Heather Bartlett
Program Manager, Water Quality Division
Washington Department of Environmental Quality
PO Box 47600
Olympia, Washington 98504-7600

Re: Approval of Washington State 2012 303(d) List

Dear Ms. Bartlett:

The U.S. Environmental Protection Agency has conducted a complete review of Washington's Section 303(d) list and supporting documentation and information. Based on this review, the EPA has determined that Washington Department of Ecology's (Ecology) list of water quality limited segments still requiring Total Maximum Daily Loads (TMDLs) meets the requirements of Section 303(d) of the Clean Water Act (CWA) and the EPA's implementing regulations for its 2012 list. Therefore, the EPA hereby approves Washington's 2012 Section 303(d) list. For reasons discussed below and in the attached decision document, EPA is expressly taking no action with respect to marine waters that will be addressed in the next listing cycle. The statutory and regulatory requirements, and the EPA's review of Ecology's compliance with each requirement, are described in Enclosure 1.

Ecology submitted the initial documentation for Washington's 2012 303(d) list on September 28, 2015, followed by several amendments containing corrections and additional documentation, the last of which was received by EPA on June 3, 2016. The submitted documentation included the 2012 303(d) list, a response to public comments on the list, the final list methodology, a TMDL priority ranking, an Integrated Report on the status of Washington's waters, and a crosswalk from the previous township/range segmentation system to the new National Hydrography Dataset (NHD) system. With today's action, the EPA has approved Washington's 2012 Section 303(d) listing of 3,571 active freshwater water body segment/pollutant records including 1,622 new water quality limited segments. In addition, the EPA has determined that the removal of 303 previously listed water quality limited segments is consistent with CWA Section 303(d) and the federal regulations.

The EPA is approving this list as the 2012 303(d) list, not as the 2014 list as Ecology had originally designated it, because the assessment includes data collected only through May 1, 2011. When Ecology submitted its 2010 303(d) list, it assessed only marine waters because Ecology was in the process of changing its segmentation method for freshwaters. EPA approved the 2010 list with the understanding that Ecology had already issued its next call for data and freshwaters would be assessed in the 2012 cycle, thus completing an assessment of all the state's waters. It was understood that Ecology would assess all of the waters of the State, both fresh and marine, for all future biennial 303(d) list reviews after the 2012 303(d) list was completed.

The process of changing the segmentation method has been more complex and taken longer than expected. On February 3, 2016, Ecology issued the data solicitation for its next biennial 303(d) list review, which will be a complete review of all freshwater and marine waters in the state. Based on the EPA's understanding of the timing of that assessment, the EPA anticipates it will be submitted as a 2014/2016 list, encompassing all the available data and information that would have been assessed for those lists had they been submitted individually. EPA is therefore only taking action on the current list insofar as it considers freshwater data submitted through the data cutoff and assessed for this submittal as the 2012 list. EPA is taking no action at this time on the State's marine waters, or the freshwater data generated after the May 1, 2011, data cutoff, with the understanding that Ecology has already made the call for data and will assess those data for its 2014/2016 list. Please note, the EPA is considering the previous marine water-only assessment and 303(d) list submitted and approved by EPA on December 21, 2012 to be Washington's 2010 303(d) list, and these marine waters remain as approved in the 2010 303(d) list. The EPA recommends that Ecology adopt the same naming convention, for consistency with both EPA approval documents and federal court filings and rulings concerning EPA's approval of the 2010 list.

The EPA would like to reiterate its support of Ecology's use of macroinvertebrate assemblage data in 303(d) listing. The EPA has determined that the bioassessment listings added during the 2012 cycle were appropriate. The bioassessment listings in Ecology's 2012 303(d) list are based on either the multivariate River Invertebrate Prediction and Classification System (RIVPACS) score or the multi-metric Benthic Index of Biotic Integrity (B-IBI) score. Both IBI and RIVPACS have undergone extensive scientific review, and this type of data is used across the world to assess aquatic resources.

The EPA's approval of the State of Washington's 2012 303(d) list does not apply to any waters, or portions thereof, that are within Indian Country. The EPA is taking no action to approve or disapprove the State's list with respect to any waters within Indian Country.

We recognize and appreciate the work of staff and managers at the Washington Department of Ecology in developing the final 2012 303(d) list. We look forward to continuing to work with you on this process to address the water quality issues in Washington. If you have any questions, please contact Jill Fullagar, Impaired Waters Program Coordinator, at (206)553-2582, or Dave Croxton, Watershed Unit Manager, at (206) 553-6694.

Sincerely,

/s/ 07-22-2016

Daniel D. Opalski, Director
Office of Water and Watersheds

Enclosures: Enclosure 1 - EPA Review of Washington 2012 303(d) Integrated Report

cc: Ms. Melissa Gildersleeve (via email)
Ms. Susan Braley (via email)
Mr. Patrick Lizon (via email)

STATUTORY AND REGULATORY BACKGROUND

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

Section 303(d)(1) of the Clean Water Act (CWA or the Act) 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 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). WQLSs 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).

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 (EPA, 2011). 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 (EPA, 2013). These guidance documents, 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. Descriptions of the five categories can be found in EPA's 2005 memo “Guidance for 2006 Assessment, Listing and Reporting Requirements Pursuant to Sections 303(d), 305(b) and 314 of the Clean Water Act” (EPA, 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.

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 identified as impaired or threatened in any Section 319 nonpoint assessment submitted to the 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. 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 (EPA, 1991). While States are required to evaluate all existing and readily available water quality-related data and information, States may decide to rely 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 CFR 130.7(b)(6) require States to include as part of their submissions to the EPA documentation to support decisions to rely or not rely on 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; and (3) any other reasonable information requested by the Region.

III. Priority Ranking

The 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 total maximum daily load (TMDL) development, and also to identify those WQLS 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 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 (EPA, 1991).

IV. 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.

ANALYSIS OF WASHINGTON'S SUBMISSION

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

The EPA has reviewed Washington's submission, and has concluded that the State developed its Section 303(d) list in compliance with Section 303(d) of the Act and 40 CFR 130.7. However, for reasons discussed below, this review was limited to Washington's freshwaters only and EPA is expressly taking no action with respect to marine waters that will be addressed in the next listing cycle. 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.

A. Washington's List Development Process

In reviewing Washington's submittal, the EPA first reviewed the methodology used by the State to develop its 303(d) list in light of Washington's approved water quality standards, and then reviewed the actual list of waters. Washington used the 2010 303(d) list as the starting point for developing the 2012 303(d) list, which updates the freshwater list. Washington followed the protocols laid out in its Water Quality Policy 1-11, July, 2012, which is a revised edition of its previous September, 2006 Policy 1-11, which was used in the development of the 2010 list. (Ecology, 2012) Washington solicited, and EPA provided, comments on revisions to its September, 2006 version of Policy 1-11 concurrently with its call for data for the 2012 303(d) list (June 22-August 31, 2011). Ecology revised the policy based on comments received, and implemented the revised policy when developing the 2012 303(d) list.

Washington's submittal documented that Ecology actively sought data collected by other federal agencies, state agencies, tribes, local governments, watershed councils and private and public organizations and individuals. On June 22, 2011 Washington sent letters to 43 agencies requesting data. On July 1, 2011, Washington sent its call for data to its electronic list-serve, which reached 1,358 contacts from local, state and federal government agencies, non-governmental organizations, academic institutions, Tribes and other interested, subscribed parties. These requests solicited freshwater data collected before May 1, 2011. New data collected before the May 1 cutoff was required to be submitted to Ecology through the Environmental Information Management (EIM) System no later than August 31, 2011. Ecology held three training sessions (one in Lacey, one in Seattle and one in Moses Lake) between July 11 and July 22, 2011 to provide information on the assessment and data submission process and the use of the EIM system (Ecology, 2015a).

Washington's July, 2011 call for data also included an announcement that Washington would be re-segmenting its waters from a township/range system to the National Hydrography Dataset (NHD.) An explanation of the changes was posted on Ecology's website in July, 2011, and the public was invited to discuss the changes at the training sessions, where a presentation on the

Enclosure 1: EPA Review of Washington 2012 303(d) Integrated Report

changes was given. A separate announcement regarding the revisions to Policy 1-11 was sent to Washington Tribes on July 24, 2012. (Ecology, 2015a)

After the call for data, Ecology revised Policy 1-11, incorporating public comments, then evaluated the freshwater data using the revised methodology and new NHD segmentation system. Ecology prepared a draft list of impaired waters using data it collected and received during the public processes that met QA/QC criteria and were consistent with Washington's listing methodology (Ecology, 2015a).

On December 1, 2014, Ecology sent Washington Tribes a letter of invitation for a pre-public review of the draft 2012 IR. Tribes were to notify Ecology by December 17, 2014 if they were interested in discussing the draft (Ecology, 2015a).

The draft 2012 IR and list of water quality limited segments were presented for public comment from March 17-May 15, 2015. An announcement was published in the State Register and sent to Ecology's list-serve on March 18, 2015. Workshops on the 2012 Integrated Report, the list of water quality limited waters and the new NHD mapping system were held in Edmonds on April 7, 2015, in Lacey on April 9, in Yakima on April 15, and in Spokane on April 16, 2015 (Ecology, 2015a).

Ecology mailed its initial documentation for the 2012 IR to the EPA on September 28, 2015. It was received by the EPA on October 1, 2015 (Ecology, 2015a). Several sets of corrections and additional supporting documentation were later sent to the EPA. Additional responsiveness summaries were sent on October 14, 2015 (Ecology, 2015b). Eleven category placement corrections were sent on February 3, 2016 (Ecology, 2016a). Additional supporting documents were submitted on March 4, 16, 29 and April 19, 2016 (Ecology, 2016b, 2016c, 2016d, 2016e). Seven additional category corrections were submitted on April 26, 2016 and nine additional corrections were submitted on June 3, 2016 (Ecology, 2016f and 2016g).

B. Public Participation

Washington's submittal documented that for the 2012 303(d) list, Washington solicited technical information and data on the conditions of Washington's surface waters from June 22 to August 31, 2011. Data received during this call for data period and data collected by Ecology were used to develop the draft Integrated Report and 303(d) list. The draft 2012 Integrated Report and 303(d) list were released for public review from March 17 to May 15, 2015. The public comment period provided the public an opportunity to look at and comment on the Integrated Report, including the draft 303(d) list. Ecology provided a Response to Comments on Washington's 2012 Integrated Report and 303(d) list, with its submission and updated it on October 14, 2015 (Ecology, 2015a, 2015b). In its Response to Comments as updated, Washington responded to a variety of both general comments, and waterbody specific comments.

C. The EPA's Review Process

Enclosure 1: EPA Review of Washington 2012 303(d) Integrated Report

When Ecology submitted its 2010 303(d) list, it assessed only marine waters because Ecology was in the process of transitioning from its previous freshwater township/range segmentation system to the National Hydrography Dataset, or NHD, involving a major transition in both its water quality database and the relevant GIS mapping schema. Waiting until the completion of such a transition would have caused Ecology considerable delay in assessing and submitting its 2010 303(d) list to EPA. The EPA approved the 2010 list with the understanding that Ecology had already issued its next call for data and that freshwaters would be assessed subsequently in this 2012 303(d) list, thus completing an assessment of all the state's waters (EPA, 2012). It was understood that following the 2012 list, Ecology would assess all of the waters of the State, both fresh and marine, for all future biennial 303(d) list reviews. Ecology issued the data solicitation for both freshwater and marine water for the next assessment on February 3, 2016. Based on the EPA's understanding of the timing of that assessment, the EPA anticipates it will be submitted as a 2014/2016 list, encompassing all the available data and information that would typically have been assessed for individual lists had they been submitted individually. The EPA is therefore only taking action on the current list insofar as it considers freshwater data submitted through the data cutoff and assessed for this submittal as the 2012 list. The EPA is taking no further action on the State's marine waters, or the freshwater data generated after the May 1, 2011 data cutoff, with the understanding that Ecology will assess those data, for which the call for data is underway, for its 2014/2016 list. For the purposes of the 2012 303(d) list, the status of Washington's marine waters remain as approved in the 2010 303(d) list.

The EPA reviewed all of the documentation that Washington submitted on September 28, 2015, as well as all subsequent corrections and additions. The submittal package included Ecology's ACCESS database file listing all waterbody records in each of the five categories, the basis and rationale for the category assignments, and explanations for any data or information on which Ecology chose not to rely; GIS shapefiles for Categories 1, 2, 4 and 5; a crosswalk spreadsheet to account for delistings/changes from previous impaired category listings, and any inactivations due to segment roll-ups resulting from NHD changes; documentation of Ecology's public process; Policy 1-11 revisions and responsiveness summary; the updated Policy 1-11, July, 2012; a list of data sources considered; responsiveness summary for comments received on the draft list; TMDL prioritization schedule; 4b rationales; and rationale for bioassessment listings. The EPA also reviewed an on-line version of Washington's database, which is available via Internet at: <https://fortress.wa.gov/ecy/wats/CandidateList.aspx>. The EPA reviewed the waters in Category 5 in 2010 and the category to which they were assigned in 2012. The EPA also identified waters assigned to Categories 1, 2, 4a and 4b in 2010 that had moved to Category 5 in 2012. The EPA reviewed the basis and rationale for waters that were removed from the 303(d) list, as well as waters that were added to it. The EPA extensively reviewed Washington's drafts and final 2012 303(d) lists, listing methodology and priority ranking, as well as the data solicitation and public participation processes.

The EPA concludes that the State properly assembled and reasonably evaluated all existing and readily available data and information for freshwaters, including data and information relating to the categories of waters specified in 40 CFR 130.7(b)(5). The State provided to the EPA its rationale for not relying on particular existing and readily available water quality-related data and information as a basis for listing waters. For the reasons set forth above, EPA's review was

limited to Washington's freshwaters only and the EPA is taking no action on the State's marine water body pollutant pairs until the State formally submits its next section 303(d) list.

The EPA would like to reiterate its support of Ecology's use of macroinvertebrate assemblage data in 303(d) listing. The EPA has determined that the bioassessment listings added during the 2012 cycle were appropriate. The bioassessment listings in Ecology's 2012 303(d) list are based on either the multivariate River Invertebrate Prediction and Classification System (RIVPACS) score or the multi-metric Benthic Index of Biotic Integrity (B-IBI) score. Both IBI and RIVPACS have undergone extensive scientific review, and this type of data is used across the world to assess aquatic resources. However, the EPA also reiterates its concerns regarding the Category thresholds Ecology has chosen for determining waterbody status. Ecology should use only one number to assess and designate when a waterbody is impaired for biology (i.e. for placing waters in Category 5). This would be based on scores falling below the single numeric threshold for two of the past five years for which data has been collected. Ecology may be able to set a higher numeric goal for specific waterbodies where appropriate, for example, as a result of a TMDL analysis and more watershed specific information.

Additionally, the July, 2012 version of Policy 1-11 that was used for the 2012 assessment provides the numeric thresholds for RIVPACS scores but only a narrative description of the B-IBI scores that are to serve as thresholds for determining whether or not a site is impaired (e.g., "poor conditions" or "very poor conditions"). However, in the "Remarks" section of an individual bioassessment listing, the threshold for Category 5 is mentioned as being ≤ 27 /RIVPACS score ≤ 0.73 , while Category 1 is ≥ 38 /RIVPACS score ≥ 0.86 . While Policy 1-11's Bioassessment section (pp. 31 -33) provides those RIVPACS scores as thresholds for Categories 1 and 5, no explanation is offered as to how the B-IBI scores were selected as thresholds for those categories. The method for establishing those ranges should be explained since the numeric thresholds determine to which category a site will be assigned. The EPA understands that a scoping process is underway for the next Policy 1-11 revision, and strongly encourages Ecology to more fully describe to the public how these thresholds are selected. Further, for the next biennial 303(d) List, EPA recommends Ecology use the new Puget Lowlands B-IBI. EPA understands that the call for data used to create the 2012 list occurred before the revisions to the Puget Lowlands B-IBI were complete, so a policy decision was made to use the old version. However, the Puget Sound Stream Benthos (PSSB) website allows the old data to be calculated on the new scale and vice versa, so a transition to the PSSB system should be straight forward.

II. Waters not listed for Water, Tissue, Sediments and Other Mediums

There are 3,571 active freshwater water body segment/pollutant records on Washington's 2012 303(d) list, including both new additions in 2012, as well as those waters that have been previously assigned to Category 5. Of these, 1,622 new waterbody segment/pollutant records were added during the 2012 303(d) list cycle. During the 2012 cycle, Washington removed 303 previously listed water body segment/pollutant pairs from Category 5, and assigned them to Categories 1-4. Ecology's Policy 1-11 describes each of the 5 Categories, as well as the parameter-specific requirements for placement in each category (Ecology, 2012). There are several paths by which a waterbody segment can be removed from Category 5. If the segment is

attaining water quality standards it is moved to Category 1. If it is found that there was an error in the listing, it is moved to Category 2. If it is determined that available data is no longer sufficient to determine impairment, the segment is moved to Category 3. If a TMDL has been approved for the segment, it is assigned to Category 4a. If a plan to achieve WQS, other than a TMDL is in place, the segment is assigned to Category 4b. If the cause of impairment is not a pollutant, the segment may be moved to Category 4c. The EPA's review of these exclusions from Category 5 is detailed below.

A. Waters not required to be listed

1. Waters Not Listed Due to Water Quality Standards Attainment. Ecology removed 116 water body segment/pollutant pairs from the 303(d) list because information shows they are meeting standards. An additional 31 water body segment/pollutant pairs were removed from Category 5 and placed in Category 3, because available data no longer met revised Category 5 threshold requirements for non-attainment. The EPA believes Ecology removed these water body segments/pollutant pairs from Washington's Section 303(d) list in compliance with Section 303(d) of the Act and 40 CFR 130.7 and in a manner consistent with Ecology's listing methodology. The EPA concludes Ecology reasonably considered existing and readily available water quality-related data and information and reasonably identified water body segments to be removed from the list because data showed water quality standards were being met. The EPA has determined the removal of these water segments is consistent with 40 CFR 130.7(b)(6). In addition, Ecology removed 57 water body segment/pollutant pairs from Category 4 (49 from 4a, 7 from 4b and 1 from 4c) because data indicates they are meeting standards.

2. Waters Not Listed Due to TMDLs Approved. Ecology removed 97 water bodies paired with a pollutant from the 303(d) list based on the EPA approval of TMDLs for these waterbodies. These 97 water bodies were placed in Category 4a, TMDL Approved, of the 2012 Integrated Report. Under the EPA regulations at 40 CFR 130.7, the 303(d) list is an inventory of waterbodies impaired by a pollutant and requiring a TMDL. The EPA has determined that Ecology's removal from the 303(d) list of 97 water segments with an EPA approved TMDL is consistent with the requirements of 40 CFR 130.7. An additional 545 waterbody segment/pollutant pairs which were not previously listed in Category 5 were also placed in Category 4a, and EPA has determined this placement also is consistent with requirements of 40 CFR 130.7.

3. Waters Not Listed Because Other Pollution Control Requirements Will Result in Attainment of Water Quality Standards Within a Reasonable Time. Ecology removed fifty-eight segments from Category 5 and placed them in Category 4b because other pollution control requirements are in place as described in the rationale submitted to EPA. Ecology placed an additional twenty-two new WQLS in Category 4b during the 2012 303(d) list cycle because other pollution control requirements are in place as described in the rationale submitted to EPA (Ecology, 2015a). Under 40 CFR 130.7(b)(1), States are not required to list WQLS still requiring TMDLs where effluent limitations required by the CWA, more stringent effluent limitations required by State or local authority, or other pollution control requirements required by State, local, or federal authority, are stringent enough to implement applicable water quality

standards. The regulation does not specify the time frame in which these various requirements must implement applicable water quality standards to support a State's decision not to list particular waters. Waterbodies with other appropriate pollution control requirements in place may be placed in Category 4b. EPA's 2006 memo, "Information Concerning 2008 Clean Water Act Sections 303(d), 305(b), and 314 Integrated Reporting and Listing Decisions," details the requirements for a Category 4b demonstration (EPA, 2006).

In order for WQLS to remain in Category 4b in future listings, Ecology must review any new progress reports and any available recent monitoring data for each of the waterbodies included in Category 4b during each list cycle and provide an analysis with the Integrated Report. If new data and information indicate an increase in pollutant concentrations, the 4b analysis must include a discussion of ongoing sources; an explanation of the way in which the adaptive management process will address recontamination; and an assessment of whether or not water quality standards will be obtained within the timeframe given in the 4b rationale (EPA, 2006).

Where standards will not be attained through implementation of the remedy relied on by Ecology from the requirements listed in 40 CFR 130.7(b)(1) in a reasonable time, it is appropriate for the water to be placed on the Section 303(d) list to ensure that implementation of the required controls and progress towards compliance with applicable standards is tracked. If it is determined that the water is, in fact, meeting applicable standards when the next Integrated Report and 303(d) list are developed, it would be appropriate for the State to remove the water from Category 4b and place the waterbody in Category 1 at that time (EPA, 2006).

4. Waters removed from the list or not listed because they comply with the natural conditions water quality standard. The term natural condition describes the quality of water that exists in the absence of human-caused pollution or disturbance. One WQLS was removed from the Category 5 and placed in Category 1 due to natural conditions for pH. Ecology's Policy 1-11 describes the requirement for placement of a waterbody in Category 1 due to natural conditions. "Waterbody segments with data indicating impairment will be placed in Category 5 unless Ecology determines that the exceedance of water quality standards is due to natural conditions or processes. Segments will be placed in Category 5 when human activities cause, or have a strong potential to cause, significant impacts in addition to natural conditions. A determination regarding natural conditions will require information and data to validate the condition, with no presumption either way. A decision to place a waterbody segment in Category 1 because the impairment is from natural conditions will require, at a minimum, identification of a likely natural source or process sufficient to produce the impairment and information to support that there are no human impacts or none in excess of the allowable limits. The Assessment may include well-reasoned best professional judgment, but this must be accompanied by information that supports the determination." (Ecology, 2012). For this one WQLS, Ecology documents data and evidence from the Suquamish Tribe that meet these requirements. The natural conditions are sufficient to account for the slight water quality excursions in these waters. It is reasonable to believe that these slight excursions are due to natural not anthropogenic causes in this instance.

B. An Analysis of Waters Removed from Washington's 2010 303(d) list

The State has demonstrated good cause for not including inactivated waterbodies on the 303(d) list. As provided in 40 CFR 130.7(b)(6)(iv), the EPA requested that the State demonstrate good cause for not including these waters. Ecology provided a crosswalk detailing roll-ups and inactivations due to the NHD conversion, or due to detected errors, such as duplications or determinations that waters were on Tribal land. The EPA has reviewed the rationale for each inactivation and finds them to be appropriate. In some cases, the GIS mapping tool had not been updated to reflect the changes detailed in the crosswalk, but the EPA understands that Ecology is aware of the needed corrections to the mapping tool and is updating the tool as needed. Ecology has provided sufficient justification and documentation for each of these inactivated records in its submission to the EPA.

IV. **Priority Ranking and Targeting**

The EPA also reviewed the State's priority ranking of listed waters for TMDL development as per 40 CFR 130.7(b)(4), which says the State, "shall include a priority ranking for all listed water quality limited segments still requiring TMDL." The EPA notes that in watersheds affected only by forest practices, Ecology has designated those watersheds a "low" priority; and that the implementation mechanism for achieving load allocations in mixed watersheds will be compliance with the forest practice rules. This prioritization and implementation decision relies heavily on the assumption that the state's forest practices rules will be effective in bringing or keeping these waters in compliance with the state surface water quality standards. The EPA understands that the state's science-based adaptive management program is examining the effectiveness of the rules, and will expeditiously revise those rules if they are found inadequate to meet the state standards. Ecology, however, has raised concerns with the pace and ability of the adaptive management program to meet those expectations (Ecology 2009). The EPA shares Ecology's concerns and supports Ecology's efforts to establish timelines and corrective milestones that will help evaluate the effectiveness of the forest practice rules.

Ecology fully details its schedule for completion of TMDLs in its "Prioritization of TMDLs" document submitted to the EPA with its 2012 water quality assessment packet (Ecology, 2015a). Washington established a prioritization process which was used to set TMDL priorities and schedules in 1997. The Memorandum of Agreement signed by Ecology and the EPA on October 29, 1997, describes the criteria used in setting priorities and the rotating basin scoping process used by the state to establish the schedule for completion of TMDLs (EPA, 1997). The 2012 prioritization schedule follows that process.

The EPA concludes that the State properly took into account the severity of pollution and the uses to be made of such waters. The EPA reviewed the State's identification of WQLS targeted for TMDL development in the next two years, and concludes that the targeted waters are appropriate for TMDL development in this period.

References

Enclosure 1: EPA Review of Washington 2012 303(d) Integrated Report

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.

Ecology. Email from Patrick Lizon, Ecology Water Quality Assessment Coordinator to Jill Fullagar, EPA Impaired Waters Coordinator re: metals delistings-Railroad Creek Watershed. June 3, 2016g.

Ecology. Email from Patrick Lizon, Ecology Water Quality Assessment Coordinator to Jill Fullagar, EPA Impaired Waters Coordinator re: Corrections to candidate 303(d) list. April 26, 2016f.

Ecology. Email from Heather Bartlett, Ecology Water Quality Program Manager to Jill Fullagar, EPA Impaired Waters Coordinator re: Buck Creek. April 19, 2016e.

Ecology. Email from Patrick Lizon, Ecology Water Quality Assessment Coordinator to Jill Fullagar, EPA Impaired Waters Coordinator re: City of White Salmon, 2nd Foster-Pepper letter. March 29, 2016d.

40 C.F.R. Part 130 Water Quality Planning and Management

40 C.F.R. Part 131 Water Quality Standards

Ecology. Email from Patrick Lizon, Ecology Water Quality Assessment Coordinator to Jill Fullagar, EPA Impaired Waters Coordinator re: More Buck Creek documents. March 16, 2016c.

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