



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

OFFICE OF WATER

May 25, 2023

Laura Watson, Director  
Washington State Department of Ecology  
Post Office Box 47600  
Olympia, Washington 98504-7600

Dear Director Watson,

This letter constitutes the U.S. Environmental Protection Agency (EPA) Administrator's Determination (Determination), pursuant to Clean Water Act (CWA) Section 303(c)(4)(B), that new and revised water quality standards (WQS) in Washington are necessary to satisfy the requirements of the CWA.<sup>1</sup> Specifically, EPA has determined that new and revised aquatic life criteria are necessary to protect against adverse aquatic life impacts related to the following nine pollutants: acrolein, aluminum, arsenic, cadmium, copper, cyanide, mercury, nickel, and selenium. This Determination is made in accordance with a court order directing EPA to determine whether new or revised aquatic life criteria for these nine pollutants are necessary to meet the requirements of the CWA. *Nw. Env'tl. Advocates v. EPA*, No. 2:20-cv-1362-MJP, Dkt. 84 (W.D. Wash.).

As explained further below, this Determination is based on EPA's evaluation of available information for these nine pollutants indicating that Washington needs new and revised criteria for these nine pollutants in order to protect Washington's designated uses. EPA has determined that new data and information have become available since Washington last adopted new or revised aquatic life criteria on how these nine pollutants may impact Washington's aquatic life designated uses. New and revised aquatic life criteria for these nine pollutants that account for new data and information will ensure that the State's WQS adequately protect aquatic life in Washington's waters.

EPA appreciates that the Washington State Department of Ecology (Ecology) identified updates to Washington's aquatic life criteria as a priority action in its April 2022 triennial review, and that in June 2022, Ecology announced plans to conduct rulemaking to adopt new or revised aquatic life criteria for certain pollutants.<sup>2</sup> As discussed below, CWA Section 303(c)(4)(B) provides the opportunity for Washington to adopt and submit new and revised aquatic life criteria to EPA prior to EPA taking final action to promulgate any such criteria. Accordingly, EPA encourages Ecology to continue its work to update the aquatic life criteria for Washington.

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<sup>1</sup> 33 U.S.C. 1313(c); see 40 CFR 131.22(b).

<sup>2</sup> Department of Ecology, April 2022. Triennial Review of Water Quality Standards for Surface Waters of the State of Washington. Publication 22-10-002. <https://apps.ecology.wa.gov/publications/documents/2210002.pdf>

## I. Statutory and Regulatory Background

Under the CWA, states have the primary responsibility for reviewing, establishing, and revising WQS applicable to their waters (CWA Section 303(c)). WQS define the desired condition of a water body, in part, by designating the use or uses to be made of the water (40 CFR 131.2 and 131.10) and by setting the numeric or narrative water quality criteria to protect those uses (40 CFR 131.2 and 131.11). There are two primary categories of water quality criteria: human health criteria and aquatic life criteria. Human health criteria protect designated human uses of a water body, such as public water supply, recreation, and fish and shellfish consumption. Aquatic life criteria protect designated aquatic life uses of a water body, such as survival, growth, and reproduction of fish, invertebrates, and other aquatic species. Regardless of their category, water quality criteria “must be based on sound scientific rationale and must contain sufficient parameters or constituents to protect the designated use. For waters with multiple use designations, the criteria shall support the most sensitive use” (40 CFR 131.11(a)(1)).

Section 304(a) of the CWA directs EPA to periodically develop and publish recommended water quality criteria “accurately reflecting the latest scientific knowledge” on the effects of pollutants on human health and welfare, including effects on aquatic life, as well as information on those pollutants, including their concentration and dispersal and how the pollutants affect receiving waters (CWA Section 304(a)(1)). EPA’s Section 304(a) recommendations are one option available to states to use in developing their own water quality criteria (CWA Section 304(a)(3)). When establishing criteria, states should establish numeric criteria based on: (1) EPA’s CWA Section 304(a) recommended criteria, (2) modified 304(a) recommended criteria that reflect site-specific conditions, or (3) other scientifically defensible methods (40 CFR 131.11(b)). States can also establish narrative criteria or criteria based on biomonitoring methods where numeric criteria cannot be established or to supplement numeric criteria. *Id.*

CWA Section 303(c)(2)(B), added in the 1987 amendments to the CWA,<sup>3</sup> requires states to adopt numeric criteria, where available, for all toxic pollutants listed pursuant to CWA Section 307(a)(1) (i.e., priority toxic pollutants<sup>4</sup>) for which EPA has published CWA Section 304(a) recommended criteria, the discharge or presence of which could reasonably be expected to interfere with the states’ designated uses.

States are required to hold a public hearing to review applicable WQS at least once every three years and, if appropriate, revise or adopt new WQS (CWA Section 303(c)(1); 40 CFR 131.20(a)). This includes adopting criteria for additional toxic pollutants and revising existing toxic pollutant criteria as appropriate based on new information. Any new or revised WQS must be submitted to EPA for review and approval or disapproval (CWA Section 303(c)(2)(A) and (c)(3)). In addition, if a state does not adopt new or revised criteria for parameters for which EPA has published new or updated CWA Section 304(a) criteria recommendations, then the state shall provide an explanation when it submits the results of its triennial review to EPA (CWA Section 303(c)(1); 40 CFR 131.20(a)).

CWA Section 303(c)(4)(B) independently authorizes the Administrator to determine that a new or revised standard is necessary to meet CWA requirements. The authority to make a determination under

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<sup>3</sup> Water Quality Act Amendments of 1987, Pub. L. 100-4, 101 Stat. 7.

<sup>4</sup> See 40 CFR part 423, Appendix A – 126 Priority Pollutants.

CWA Section 303(c)(4)(B) is discretionary and resides with the Administrator, unless delegated by the Administrator (40 CFR 131.22(b)). For the purposes of this Determination, the Administrator has delegated this authority to EPA's Assistant Administrator for the Office of Water.

## II. Background on Washington's Aquatic Life Criteria and Relevant Litigation

On February 9, 1988, Washington submitted freshwater and marine aquatic life criteria for 26 priority toxic pollutants, which EPA approved on March 4, 1988.<sup>5</sup> At that time, EPA also determined under CWA Section 303(c)(4)(B) that some additional aquatic life criteria were necessary in Washington to comply with CWA Section 303(c)(2)(B) and promulgated aquatic life criteria for Washington in the 1992 National Toxics Rule – acute and chronic freshwater and marine arsenic and selenium criteria, chronic marine copper criteria, and chronic marine cyanide criteria.<sup>6</sup> Following the 1992 National Toxics Rule promulgation, EPA approved new and revised aquatic life criteria for toxic pollutants submitted by Washington on three occasions (1993, 1998, and 2007) and took subsequent actions to withdraw Washington from the National Toxics Rule. As a result of those actions, the only aquatic life criteria applicable in Washington are State-adopted and EPA-approved criteria; Washington is no longer in the National Toxics Rule for aquatic life criteria.<sup>7</sup> Washington's last update to its aquatic life criteria for toxic pollutants was approved by EPA in 2007.

This Determination relates to a 2013 Administrative Procedure Act rulemaking petition from Northwest Environmental Advocates (NWEA) requesting that EPA “update the State of Washington’s water quality standards for the protection of . . . aquatic life from toxic contaminants.”<sup>8</sup> The petition requested, in pertinent part, that EPA “determine that the State of Washington has failed to adopt such . . . aquatic life criteria as are required by Section 303(c)(2)(B) in each triennial review of its water quality standards conducted since 1992” and that EPA “promulgate new federal regulations applicable to Washington, pursuant to Section 303(c)(4), setting forth new and revised water quality standards as necessary to meet the requirements of the CWA.”<sup>9</sup> EPA denied NWEA’s petition in 2017, explaining that it was not determining that new or revised criteria were *not* necessary to meet CWA requirements.<sup>10</sup> Rather, in declining to undertake the time and resource-intensive evaluation to determine whether new or revised aquatic criteria were in fact necessary, EPA stated that federal rulemaking authority was not the most effective or practical means of addressing the concerns raised in the petition and that it was exercising its discretion to allocate Agency resources to other regional and national water quality efforts.<sup>11</sup> EPA further explained its strong preference to support states in their development of WQS to protect state waters, rather than to promulgate federal WQS, and noted that Washington’s strategic plan identified aquatic life criteria updates as a future action.<sup>12</sup>

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<sup>5</sup> See U.S. EPA. (Dec. 22, 1992). *Establishment of Numeric Criteria for Priority Toxic Pollutants*, 57 FR 60848, 60857.

<sup>6</sup> *Id.*

<sup>7</sup> Washington has since been withdrawn from the National Toxics Rule for human health criteria as well (see 40 CFR 131.45).

<sup>8</sup> Northwest Environmental Advocates, *Petition for CWA Section 303(c) Determinations and Rulemaking on Washington Water Quality Criteria* (Oct. 28, 2013), at 1.

<sup>9</sup> *Id.* at 2.

<sup>10</sup> “Re: Final Response to Petition for Rulemaking on Water Quality Standards for Toxics in the State of Washington.” Letter from Michael H. Shapiro, Acting Assistant Administrator for the Office of Water, to Nina Bell, Executive Director Northwest Environmental Advocates (May 31, 2017), at 6.

<sup>11</sup> *Id.*

<sup>12</sup> *Id.* at 1, 3.

In 2020, NWEA filed a Complaint in the Western District of Washington challenging EPA’s denial of its petition.<sup>13</sup> In the ensuing litigation, the District Court found that EPA’s denial was arbitrary and capricious, vacated that denial, and initially remanded the petition back to EPA “to make a necessity determination” pursuant to the petition, which covered numerous pollutants beyond the nine subject to this Determination.<sup>14</sup> On August 30, 2022, the court issued a modified order directing EPA to grant NWEA’s petition with respect to only nine pollutants: acrolein, aluminum, arsenic, cadmium, copper, cyanide, mercury, nickel, and selenium, no later than September 1, 2022.<sup>15</sup> The order further provided that EPA would make an Administrator’s Determination with respect to the nine pollutants no later than June 1, 2023.<sup>16</sup>

On August 30, 2022, EPA granted the petition for the nine pollutants specified in the court’s order. In its letter to NWEA, EPA explained that it based its decision to grant the petition on the potential on-the-ground environmental impact of discharges of these pollutants into Washington waters and an initial review of readily available data.<sup>17</sup> By granting the petition for these nine pollutants, EPA agreed to evaluate whether new or revised criteria were necessary for these pollutants. EPA is now issuing an Administrator’s Determination for these pollutants consistent with the court’s modified order.<sup>18</sup>

### **III. Washington’s Current Aquatic Life Criteria Do Not Protect Washington’s Designated Uses With Respect to These Pollutants**

Washington has CWA-effective aquatic life criteria for seven of the nine pollutants for which EPA granted the petition to evaluate whether new or revised criteria are necessary (arsenic, cadmium, copper, cyanide, mercury, nickel, and selenium). These pollutants are each naturally occurring but may also be found in aquatic systems as a result of anthropogenic sources.<sup>19</sup> For the remaining two pollutants – acrolein and aluminum – available data and information suggest that those pollutants are present in Washington’s waters and can reasonably be expected to interfere with Washington’s aquatic life designated uses. Since Washington does not currently have aquatic life criteria for acrolein or aluminum, these two pollutants are less likely than the others to be captured in a review of Washington’s water

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<sup>13</sup> *Nw. Envtl. Advocates v. EPA*, No. 2:20-cv-1362-MJP, Dkt. 1 (W.D. Wash.).

<sup>14</sup> *Id.* at Dkt. 57 p. 22; *id.* at Dkt. 72 p. 3-4 (noting the “numerous toxic pollutants” covered by the petition, including a dozen banned chemicals).

<sup>15</sup> *Id.*

<sup>16</sup> *Id.*

<sup>17</sup> “Re: Revised Response to Petition for Rulemaking on Water Quality Criteria for Toxics in the State of Washington.” Letter from Radhika Fox, Assistant Administrator for the Office of Water, to Nina Bell, Executive Director Northwest Environmental Advocates (August 30, 2022).

<sup>18</sup> *Id.*

<sup>19</sup> See US EPA 2022. TRI Explorer (2020 National Analysis Dataset (October 2021, released October 2021)) [Internet database]. Accessed January 26, 2023. Retrieved from [https://enviro.epa.gov/triexplorer/tri\\_release.chemical](https://enviro.epa.gov/triexplorer/tri_release.chemical) (indicating releases of arsenic, copper, mercury, and nickel compounds in Washington); Washington State Department of Ecology. n.d. Washington State Water Quality Assessment 303(d)/305(b) List [Internet Database]. Accessed January 26, 2023. Retrieved from <https://apps.ecology.wa.gov/ApprovedWQA/ApprovedPages/ApprovedSearch.aspx> (indicating that certain waters in Washington are impaired due to arsenic, cadmium, copper, mercury, and nickel); Department of Ecology 2016. Final Cost-Benefit and Least Burdensome Alternative Analyses. Chapter 173-201A WQC Water Quality Standards for Surface Waters of the State of Washington. Publication no. 16-10-019, at 25-27 (Washington’s 2016 permit and effluent review indicates arsenic, copper, cyanide, mercury, nickel, and selenium are among the five most detected chemicals across various types of municipal and industrial facilities in Washington).

quality assessments and data from permitted dischargers.<sup>20</sup> Therefore, EPA evaluated other data and information to examine if these pollutants may be present in Washington’s surface waters.

Acrolein is an aquatic herbicide often used in irrigation canals to control for weeds and algae. Washington’s “Irrigation System Aquatic Weed Control” general permit (both the existing permit<sup>21</sup> and the draft permit reissuance<sup>22</sup>) lists acrolein as a permitted pollutant. The general permit “conditionally authorizes the use” of acrolein and includes mention of application plans, monitoring requirements, and a maximum concentration at the point of compliance.<sup>23</sup> Aluminum is found in most rocks and soils and can enter surface water through weathering and erosion of rock.<sup>24</sup> Given the natural abundance of aluminum, it is highly likely that the element is already present in Washington’s surface waters. Additionally, as discussed further below, in its April 14, 2022, triennial review report,<sup>25</sup> Ecology indicated that it would consider future adoption of aquatic life criteria, including acrolein, aluminum, arsenic, cadmium, copper, mercury, nickel, and selenium (among other pollutants).

After reviewing the evidence indicating that aquatic life in Washington may be exposed to all nine toxic pollutants subject to this Determination, EPA relied primarily on two main sources of available information to assess whether Washington needs new or revised aquatic life criteria for those nine toxic pollutants to protect applicable aquatic life designated uses.<sup>26</sup> First, EPA compared Washington’s existing criteria to EPA’s CWA Section 304(a) national recommended criteria. Second, EPA evaluated whether recent Endangered Species Act (ESA) consultations for relevant species in neighboring states support a conclusion that new or revised criteria might be necessary to protect Washington’s aquatic life designated uses, which include threatened and endangered species listed under the ESA.

### *Washington’s Existing Aquatic Life Criteria Compared to EPA’s CWA Section 304(a) National Recommended Criteria*

As noted above, Washington has existing aquatic life criteria for seven of the nine pollutants subject to this Determination (arsenic, cadmium, copper, cyanide, mercury, nickel, and selenium) and does not have aquatic life criteria for the remaining two pollutants (acrolein and aluminum). EPA has published national recommended criteria for all nine pollutants under CWA Section 304(a). EPA periodically updates the national recommended criteria as new science and data become available. Of the nine pollutants relevant to this Determination, EPA has published updates to five of the corresponding CWA Section 304(a) national recommended criteria in the past 14 years. Table 1 provides a list of each of the

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<sup>20</sup> Washington does, however, have human health criteria for acrolein, and has used aquatic life criteria from the neighboring State of Oregon to derive specific permit limits, when appropriate. *See*:

<https://fortress.wa.gov/ecy/ezshare/wq/permits/ISAWC-FactSheetforDraftPermit.pdf>

<sup>21</sup> Existing general permit as of May 2023: Department of Ecology. Irrigation System Aquatic Weed Control. National Pollutant Discharge Elimination System (NPDES) and State Waste Discharge General Permit WA0991000. May 16, 2012. Accessed January 30, 2023. <https://ecology.wa.gov/DOE/files/6b/6b9e466a-139b-4fdb-834c-2b1262cf25c0.pdf>

<sup>22</sup> Draft general permit as of May 2023: Department of Ecology. Irrigation System Aquatic Weed Control General Permit. National Pollutant Discharge Elimination System and State Waste Discharge General Permit. n.d. Accessed January 30, 2023. <https://fortress.wa.gov/ecy/ezshare/wq/permits/ISAWC-GeneralPermit-Draft.pdf>

<sup>23</sup> Department of Ecology. Draft permit page 18. Existing permit page 6.

<sup>24</sup> US EPA. 2022. Aquatic Life Criteria – Aluminum. <https://www.epa.gov/wqc/aquatic-life-criteria-aluminum>

<sup>25</sup> Department of Ecology. April 2022. Triennial Review of Water Quality Standards for Surface Waters of the State of Washington. Publication 22-10-002. <https://apps.ecology.wa.gov/publications/documents/2210002.pdf>

<sup>26</sup> EPA notes that the analysis conducted to support this Determination is specific to these pollutants in Washington waters and is based on readily available information.

nine pollutants, the most recent EPA publication of CWA Section 304(a) national recommended criteria for that pollutant, and the year in which Washington most recently adopted or updated criteria for that pollutant.

Table 1 – History of Washington Criteria Adoption and EPA’s National Recommended Criteria for Toxic Pollutants Relevant to this Determination.

<b>Pollutant</b>	<b>Latest Update by EPA</b>	<b>Latest Update by Washington</b>
Acrolein	2009	None
Aluminum	2018	None
Arsenic	1995	1992
Cadmium	2016	1997
Copper	2007	1997
Cyanide	1985	2003
Mercury	1995	1997
Nickel	1995	1997
Selenium	2016	1997

States are required to adopt criteria “that protect the designated use . . . based on sound scientific rationale.” 40 CFR 131.11(a)(1). EPA’s regulations also provide that states should adopt criteria based on EPA’s 304(a) national recommended criteria, the 304(a) recommended criteria modified to reflect site-specific conditions, or other scientifically defensible methods. 40 CFR 131.11(b)(1). Updates to EPA’s CWA Section 304(a) national recommended criteria reflect the latest scientific knowledge on the effects of those pollutants on aquatic life.<sup>27</sup>

New scientific information has been developed since Washington’s adoption of its currently effective aquatic life criteria and that information is reflected in EPA’s latest 304(a) national recommended criteria. Nonetheless, as explained further below, for some of the nine pollutants, Washington’s criteria are not based on EPA’s latest 304(a) criteria, nor are they based on modifications of EPA’s 304(a) criteria to reflect site-specific conditions or other scientifically defensible methods. See 40 CFR 131.11(b)(1). For others, the State’s criteria are based on recommendations that EPA is updating due to advances in the relevant science.

For acrolein and aluminum, Washington lacks any aquatic life criteria, despite recent updates to EPA’s 304(a) national recommended criteria and evidence that those pollutants are present in Washington’s waters. EPA’s most recent updates to the CWA Section 304(a) national recommended criteria for cadmium, copper and selenium rely on the best available science and supersede prior recommendations for these chemicals. Washington’s criteria for the remaining four pollutants – mercury, nickel, cyanide, and arsenic – are based on 304(a) criteria recommendations that the agency is in the process of updating based on the best available science. For mercury and nickel, Washington’s current criteria are based on EPA’s 1995 304(a) recommendations. EPA is currently evaluating data on mercury toxicity from dietary

<sup>27</sup> Section 304(a)(1) directs EPA to publish criteria “accurately reflecting the latest scientific knowledge[.]” EPA’s water quality criteria published under Section 304(a)(1) of the CWA are not legally binding requirements, but rather serve as recommendations for states.

exposures for the purpose of developing protective mercury criteria for the State of Idaho and anticipates the Idaho work will help inform a future update to the CWA Section 304(a) national recommendation for mercury.<sup>28</sup> Nickel is one of the metals currently being studied as part of EPA’s Cooperative Research and Development Agreement (CRADA).<sup>29</sup> As part of the CRADA, EPA plans to update the modeling approach for nickel criteria derivation and subsequently develop updated CWA Section 304(a) national recommended criteria for nickel. EPA is similarly in the process of evaluating the best available science regarding the impacts of cyanide and arsenic to aquatic species. Although EPA has not yet completed updates to these national criteria recommendations, as explained below, the agency has evidence indicating that Washington’s existing criteria for these four pollutants are not protective of aquatic life designated uses in Washington’s waters based on ESA consultations completed in neighboring Pacific Northwest states.

### *Review of Endangered Species Act Consultations for Relevant Species in Neighboring States*

EPA evaluated data and information compiled in recent ESA Section 7 consultations with the National Marine Fisheries Service (NMFS) and U.S. Fish and Wildlife Service (FWS) – the agencies for determining jeopardy under the ESA – regarding EPA actions on aquatic life criteria in neighboring states (Oregon and Idaho).<sup>30</sup> If NMFS and/or FWS find that a criterion would likely jeopardize the continued existence of an ESA-listed species or cause an adverse modification of critical habitat, that is a factor that EPA may consider in evaluating whether new or revised criteria are necessary to protect the applicable designated uses. While aquatic conditions and species vary within and between states, several species reside in or travel between multiple states and evaluations of the potential effects of a certain pollutant on a species in one state may be scientifically relevant to how the same pollutant can affect the same species in a neighboring state. For example, in the Pacific Northwest, numerous salmonid species travel within and between Oregon, Idaho, and Washington. Therefore, it is technically appropriate to evaluate ESA consultations for criteria in neighboring states to inform whether the same or less stringent<sup>31</sup> aquatic life criteria in Washington could reasonably be expected to impact the same species or interfere with other aquatic life designated uses.

When reviewing the results of relevant ESA consultations, EPA evaluated whether NMFS or FWS concluded that a criterion in Oregon or Idaho would jeopardize a threatened or endangered species, or cause adverse modification of critical habitat, that is also present in Washington and is thus covered by Washington’s aquatic life use, and whether that criterion was equal to or more stringent than Washington’s existing aquatic life criterion for the pollutant. In 2012, NMFS concluded that EPA’s proposed approval of Oregon’s freshwater acute cadmium criterion, freshwater acute and chronic copper

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<sup>28</sup> See *Nw. Env’tl. Advocates v. EPA*, No. 1:13-cv-00263-DCN, Dkt. 119 (D. Id.).

<sup>29</sup> US EPA. “Aquatic Life Criteria and Methods for Toxics.” February 7, 2023. <https://www.epa.gov/wqc/aquatic-life-criteria-and-methods-toxics>. Accessed March 3, 2023.

<sup>30</sup> Under Section 7 of the ESA, Federal agencies must consult with either FWS and/or NMFS, depending on the species at issue, to insure that any action the agency carries out, funds, or authorizes is not likely to jeopardize the continued existence of any ESA-listed species or result in the destruction or adverse modification of critical habitat.

<sup>31</sup> EPA notes that stringency alone does not dictate whether a criterion is or is not protective. As science advances, it may reveal that a criterion less stringent than the previously adopted criterion (or 304(a) recommendation) is protective of the applicable designated use. However, for the purposes of this Determination, EPA is using stringency as a surrogate metric because the data and information indicating that more stringent criteria are necessary to protect Washington’s aquatic life uses all post-dated Washington’s most recent update to its aquatic life criteria and therefore Washington could not have considered those data and information when concluding that their less stringent criteria are protective.

criteria, and freshwater acute and chronic aluminum criteria would jeopardize the continued existence of several salmonids, green sturgeon, eulachon, and Southern Resident killer whales.<sup>32</sup> These species are also present in Washington, and Washington's corresponding criteria for cadmium and copper are higher (less stringent) than the values EPA was proposing to approve in Oregon. Washington lacks aquatic life criteria for aluminum. In 2014 and 2015 respectively, NMFS<sup>33</sup> and FWS<sup>34</sup> found that EPA's approval of Idaho's freshwater chronic arsenic criterion, freshwater acute and chronic copper criteria, freshwater acute and chronic cyanide criteria, freshwater chronic mercury criterion, and freshwater chronic selenium criterion would jeopardize several salmonids. These species are also present in Washington, and Washington's corresponding criteria for arsenic, copper, cyanide, mercury, and selenium are higher (less stringent) than the values in Idaho. In summary, Washington's criteria for these pollutants are equal to or less stringent than criteria that NMFS and FWS found would likely jeopardize the survival of certain species in Oregon and Idaho that are also present in Washington. Here, in EPA's view, this indicates these criteria are not protective of Washington's aquatic life designated uses.

#### **IV. Clean Water Act Section 303(c)(4)(B) Determination**

EPA has reviewed available information regarding (1) how Washington's existing criteria (or lack thereof) for nine pollutants – acrolein, aluminum, arsenic, cadmium, copper, cyanide, mercury, nickel, and selenium – compare to EPA's CWA 304(a) national recommended criteria that reflect updated science, and (2) whether Washington's existing criteria for those pollutants protect aquatic life designated uses. EPA has concluded that Washington's existing aquatic life criteria for arsenic, cadmium, copper, cyanide, mercury, nickel, and selenium are not protective of the applicable designated uses and based on sound scientific rationale, as required by EPA's regulation at 40 CFR 131.11, and that Washington lacks aquatic life criteria for acrolein and aluminum where available information indicates that Washington needs criteria for those pollutants to protect applicable designated uses.

Accordingly, EPA is determining, pursuant to CWA Section 303(c)(4)(B) and 40 CFR 131.22(b), that new aquatic life criteria are needed for acrolein and aluminum, and revised aquatic life criteria are needed for arsenic, cadmium, copper, cyanide, mercury, nickel, and selenium to meet the requirements of the CWA for Washington.

#### **V. Washington's Current Efforts to Update its Aquatic Life Criteria**

On April 14, 2022, Ecology submitted to EPA its triennial review report for Chapter 173-201A of the Washington Administrative Code (WAC) for WQS for surface waters of the State.<sup>35</sup> The triennial review report evaluated EPA's aquatic life 304(a) national criteria recommendations and the aquatic life criteria currently in effect for CWA purposes in Washington's WQS. For each of EPA's 304(a) criteria

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<sup>32</sup> National Marine Fisheries Service. August 14, 2012. Jeopardy and Adverse Modification of Critical Habitat Biological Opinion for the Environmental Protection Agency's Proposed Approval of Certain Oregon Administrative Rules Related to Revised Water Quality Criteria for Toxic Pollutants. p. 536, 547.

<sup>33</sup> National Marine Fisheries Service. May 7, 2014. Final Endangered Species Act Section 7 Formal Consultation and Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Consultation for Water Quality Toxics Standards for Idaho. p. 297

<sup>34</sup> Fish and Wildlife Service. June 25, 2015. Biological Opinion for the Idaho Water Quality Standards for Numeric Water Quality Criteria for Toxic Pollutants. p. 258

<sup>35</sup> Department of Ecology. April 2022. Triennial Review of Water Quality Standards for Surface Waters of the State of Washington. Publication 22-10-002. <https://apps.ecology.wa.gov/publications/documents/2210002.pdf>



recommendations, Washington made one of three determinations: *Future Action*, *Already Addressed*, or *Not Scheduled for Adoption*. *Future Action* indicates that Ecology will consider adoption of EPA's 304(a) criteria recommendations in upcoming rulemaking efforts. *Already Addressed* indicates that the currently adopted criteria in Washington's standards are either equal to or are more stringent than EPA's 304(a) national recommendations and therefore Washington does not intend to prioritize revisions to those criteria. *Not Scheduled for Adoption* indicates that Ecology does not intend to update these criteria in the near future for other reasons, despite any lack of alignment between those criteria and EPA's CWA Section 304(a) recommendations. Of the nine pollutants in this Determination, Ecology categorized eight (acrolein, aluminum, arsenic, cadmium, copper, mercury, nickel, and selenium) for *Future Action*. Ecology categorized cyanide as *Already Addressed* because Washington's existing statewide criteria are consistent with EPA's existing 304(a) national recommendations.

On June 23, 2022, Ecology announced its plans to move forward with a rulemaking to amend WAC 173-201A-240, toxic substances, specifically the aquatic life criteria.<sup>36</sup> EPA appreciates Washington's ongoing commitment to updating its aquatic life criteria.

This Determination does not preclude Washington from proceeding with its own rulemaking effort, and EPA encourages Washington to continue its work to update and adopt aquatic life criteria for toxic pollutants. Nevertheless, CWA Section 303(c)(4) requires that the Administrator promptly prepare and publish proposed regulations setting forth new or revised WQS following a Determination. However, if Washington adopts, and EPA approves, new or revised WQS that meet the requirements of the CWA before EPA proposes or promulgates federal WQS, then EPA would no longer be obligated to propose or promulgate those federal WQS.

## **VI. Next Steps**

Following this Determination, the next step is for EPA to propose new and revised aquatic life criteria for these nine pollutants. For some of the nine pollutants, EPA's existing CWA Section 304(a) national recommended criteria are likely appropriate for proposal in Washington. However, for other pollutants in this Determination, EPA is still in the process of evaluating the latest science available – as well as Washington-specific information on surface water conditions and the presence of sensitive aquatic organisms, where applicable – to derive aquatic life criteria for Washington which are protective of designated uses and based on sound scientific rationale. After these analyses are completed, EPA will then develop proposed federal regulations setting forth such criteria for Washington. EPA will seek feedback from Washington, as well as interested stakeholders, on EPA's proposed rulemaking(s) in accordance with 40 CFR 131.22(c) and 131.20(b). After any federal rule is proposed, EPA plans to give full consideration to all comments received before proceeding to the final rule stage. As indicated above, CWA Section 303(c)(4)(B) provides the opportunity for Washington to adopt and submit new and revised aquatic life criteria to EPA prior to EPA taking final action to promulgate any such criteria. Accordingly, EPA encourages Washington to continue its work to update its aquatic life criteria.

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<sup>36</sup> Department of Ecology. Chapter 173-201A WAC (Aquatic Life Toxics Criteria). Webpage. Accessed February 1, 2023. <https://ecology.wa.gov/Regulations-Permits/Laws-rules-rulemaking/Rulemaking/WAC-173-201A-Aquatic-Life-Toxics-Criteria>

EPA is committed to working closely and collaboratively with Washington to ensure that its aquatic life criteria are protective of applicable designated uses, based on sound scientific rationale, and consistent with the requirements of the CWA.

Sincerely,

A handwritten signature in black ink, appearing to be 'Radhika Fox', with a long horizontal stroke extending to the right.

Radhika Fox  
Assistant Administrator

cc:

Casey Sixkiller, Regional Administrator, EPA Region 10  
Dan Opalski, Director, Water Division, EPA Region 10