



Concise Explanatory Statement Chapter 173-201A WAC Water Quality Standards for Surface Waters of the State of Washington

Summary of Rulemaking and response to comments

Washington State Department of Ecology
Olympia, Washington

September 2021, Publication 21-10-035

Publication Information

This document is available on the Department of Ecology's website at:
<https://apps.ecology.wa.gov/publications/summarypages/2110035.html>

Contact Information

Water Quality Program

P.O. Box 47600

Olympia, WA 98504-7600

Phone: 360-407-6600

Website: [Washington State Department of Ecology](http://www.ecology.wa.gov)¹

ADA Accessibility

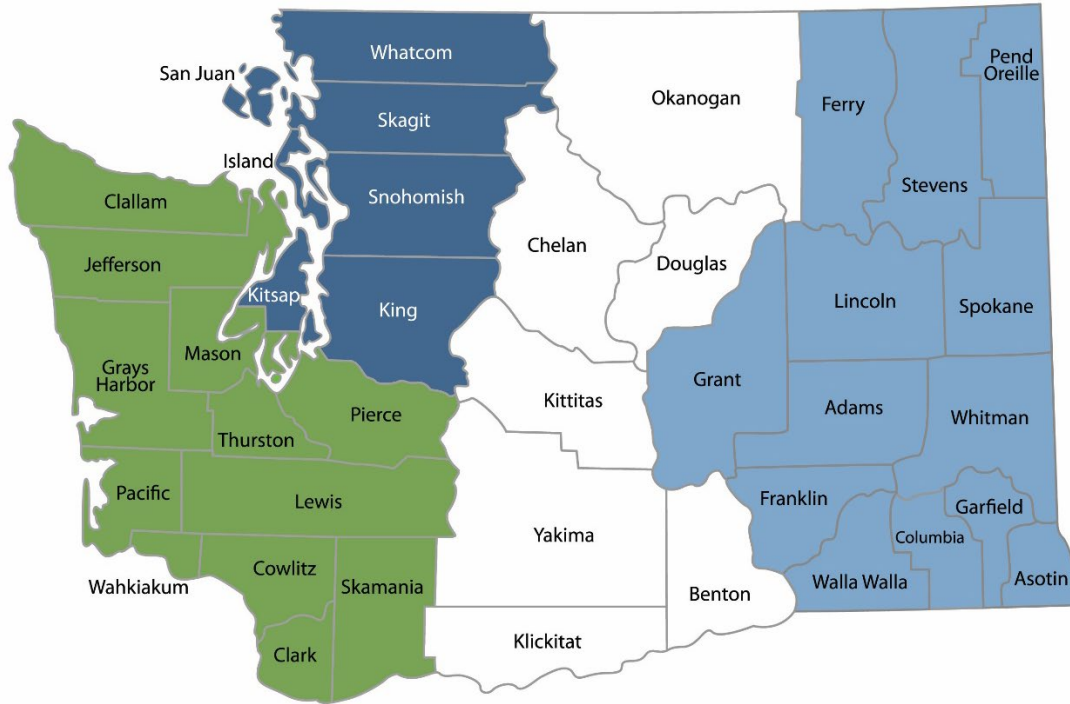
The Department of Ecology is committed to providing people with disabilities access to information and services by meeting or exceeding the requirements of the Americans with Disabilities Act (ADA), Section 504 and 508 of the Rehabilitation Act, and Washington State Policy #188.

To request an ADA accommodation, contact Ecology by phone at 360-407-6600 or email at marla.koberstein@ecy.wa.gov. For Washington Relay Service or TTY call 711 or 877-833-6341. Visit Ecology's website for more information.

¹ <http://www.ecology.wa.gov/contact>

Department of Ecology's Regional Offices

Map of Counties Served



Southwest Region 360-407-6300	Northwest Region 206-594-0000	Central Region 509-575-2490	Eastern Region 509-329-3400
---	---	---------------------------------------	---------------------------------------

Region	Counties served	Mailing Address	Phone
Southwest	Clallam, Clark, Cowlitz, Grays Harbor, Jefferson, Mason, Lewis, Pacific, Pierce, Skamania, Thurston, Wahkiakum	PO Box 47775 Olympia, WA 98504	360-407-6300
Northwest	Island, King, Kitsap, San Juan, Skagit, Snohomish, Whatcom	PO Box 330316 Shoreline, WA 98133	206-594-0000
Central	Benton, Chelan, Douglas, Kittitas, Klickitat, Okanogan, Yakima	1250 W Alder St Union Gap, WA 98903	509-575-2490
Eastern	Adams, Asotin, Columbia, Ferry, Franklin, Garfield, Grant, Lincoln, Pend Oreille, Spokane, Stevens, Walla Walla, Whitman	4601 N Monroe Spokane, WA 99205	509-329-3400
Headquarters	Across Washington	PO Box 46700 Olympia, WA 98504	360-407-6000

Concise Explanatory Statement

Chapter 173-201A WAC Water Quality Standards for Surface Waters of the State of Washington

Water Quality Program
Washington State Department of Ecology
Olympia, WA

September 2021 | Publication 21-10-035



DEPARTMENT OF
ECOLOGY
State of Washington

This page is purposeely left blank

Table of Contents

Introduction..... 6

Reasons for Adopting the Rule 2

Differences between the Proposed Rule and Adopted Rule..... 3
 Changes to WAC 173-201A-602, Table 602: WRIA 47 – Chelan: 3

List of Commenters and Response to Comments 4
 List of entities that submitted a comment 4
 Organization of comments 5
 Comments and Responses..... 5

Appendix A: Citation List 26

Appendix B: Public Comments..... 29

Introduction

The purpose of a Concise Explanatory Statement is to:

- Meet the Administrative Procedure Act (APA) requirements for agencies to prepare a Concise Explanatory Statement (RCW 34.05.325).
- Provide reasons for adopting the rule.
- Describe any differences between the proposed rule and the adopted rule.
- Provide Ecology’s response to public comments.

This Concise Explanatory Statement provides information on The Washington State Department of Ecology’s (Ecology) rule adoption for:

Title:	Water Quality Standards for Surface Waters of the State of Washington
WAC Chapter(s):	173-201A
Adopted date:	September 17, 2021
Effective date:	October 18, 2021

To see more information related to this rulemaking or other Ecology rulemakings please visit our website: <https://ecology.wa.gov/About-us/How-we-operate/Laws-rules-rulemaking>.

Reasons for Adopting the Rule

On December 20, 2019, Public Utility District No. 1 of Chelan County (Chelan PUD) submitted a proposal for a UAA for the aquatic life designated use on the Chelan River to better reflect current and historical uses. The current use designation includes salmonid spawning, rearing and migration for the entire river.

The Lake Chelan hydroelectric project was relicensed by the Federal Energy Regulatory Commission (FERC) in 2006. As part of the relicensing, Ecology issued a [401 Water Quality Certification](#)² (WQC). The FERC license required Chelan PUD to rewater the river from which flows had been diverted for hydropower for over 80 years.

The returned waters now flow year-round through the four miles of the Chelan River to the confluence with the Columbia River. The Chelan River travels through a naturally steep canyon that acts as a barrier to salmonid migration to most of the river. However, salmonids now return to spawn in the lowest half-mile reach near the confluence with the Columbia.

In response to new license conditions and the WQC, the Chelan PUD implemented a series of fishery studies as well as habitat and flow improvement projects to meet salmonid spawning, survival, and habitat use objectives in the lower reach of the river, and to assess the potential for resident fish habitat in the upper reaches. After ten years of monitoring, adaptive management, and consultation with the Chelan River Fishery Forum, Chelan PUD reported on what biological objectives were met and why some other objectives were not met. The final report proposed changes to the Chelan River aquatic life designated uses, including corresponding temperature and dissolved oxygen criteria, to align with the highest achievable water quality.

Ecology's WQC of Chelan's FERC license provides that Ecology make a determination, based on the outcome of the evaluation of the monitoring and adaptive management program, to modify the water quality standards to reflect the objectives achieved.

Based on the previous research and consultation with Ecology and the Environmental Protection Agency (EPA), Chelan PUD submitted a UAA proposal. We responded to the UAA request on February 18, 2020, and confirmed that the information provided is sufficient to proceed toward rulemaking in accordance with WAC 173-201A-440. We then requested further data and information from Chelan PUD to assist in our analysis of the UAA proposal.

After reviewing the Chelan PUD's submittal and relevant data, we determined that the aquatic life use designation currently in the rule (salmonid spawning, rearing, and migration) is not appropriate. Ecology is adopting new aquatic life use designations appropriate for two unique segments of the river. These designations more accurately represent the aquatic life potential of the Chelan River than the aquatic life designations currently in the rule. Ecology's Chelan River Use Attainability Analysis technical support document details the reasons for the change and the uses.

New aquatic life use designations necessitate corresponding site-specific water quality criteria. Ecology reviewed criteria in the existing rule and determined the temperature criteria do need to be revised as part of this rulemaking. The revised temperature criteria are based on the natural

² [https://www.ezview.wa.gov/Portals/_1962/images/FERC 401s/LkChelanOrder1233.pdf](https://www.ezview.wa.gov/Portals/_1962/images/FERC%20401s/LkChelanOrder1233.pdf)

temperature increase that occurs over the distance of the Chelan River due to solar heating. The temperature criteria supporting revisions to the aquatic life uses will rely on the natural thermal regime of the Chelan River compared with the single numeric value currently in rule.

Ecology also determined the dissolved oxygen criteria need to be revised as part of this rulemaking. The dissolved oxygen criteria supporting revisions to the aquatic life uses adds an oxygen saturation component to the dissolved oxygen criteria for the Chelan River, compared with the criteria currently in the rule. The primary reason for this addition is that as water temperature increases, the capacity of oxygen to dissolve in water decreases. The oxygen saturation component accounts for the elevated water temperatures in the Chelan River that is a direct result of the influence of Lake Chelan on water quality.

Differences between the Proposed Rule and Adopted Rule

RCW 34.05.325(6)(a)(ii) requires Ecology to describe the differences between the text of the proposed rule as published in the Washington State Register and the text of the rule as adopted, other than editing changes, stating the reasons for the differences.

There are some differences between the proposed rule filed on March 24, 2021 and the adopted rule filed on September 17, 2021. Ecology made these changes for all or some of the following reasons:

- In response to comments we received.
- To ensure clarity and consistency.
- To meet the intent of the authorizing statute.

The following content describes the changes and Ecology's reasons for making them. Differences between the proposed rule and adopted rule are reflected in strikethrough and underlined text.

Changes to WAC 173-201A-602, Table 602: WRIA 47 – Chelan:

- Added Note 5 for Reach 4: Lake Chelan Dam tailrace waters must be cooler than Chelan River when the river water temperature is greater than 17.5°C as a daily maximum above the confluence with powerhouse channel.

Reason for change: During the comment period, Ecology received a comment from the Chelan PUD requesting clarification on the geographical extent that criteria apply in Reach 4 of Chelan River, specifically related to Lake Chelan Dam tailrace waters. We have added a narrative criterion for Lake Chelan Dam tailrace waters based on monitoring data provided and protection of the highest attainable use.

- Note 1: The temperature criterion is 17.5°C as a 7-DADMax. When water temperature is greater than 17.5°C as a daily maximum at the end of the canyon (compliance point), the temperature within the water body segment may not exceed a 7-DADMax increase of ~~3.75°C~~ 3.50°C above temperature measured at the dam outlet. The dissolved oxygen

criteria are 8.0 mg/L or 90% saturation. The 7-DADMax temperature increase and dissolved oxygen criteria are not to be exceeded at a frequency of more than once every ten years on average.

- Note 3: The temperature criterion is 17.5°C as a 7-DADMax. When water temperature is greater than 17.5°C as a daily maximum above the confluence with powerhouse channel (compliance point), the temperature within the water body segment may not exceed a 7-DADMax increase of ~~1.25°C~~ 1.20°C above temperature measured at the end of canyon. The dissolved oxygen criteria are 8.0 mg/L or 95% saturation. The 7-DADMax temperature increase and dissolved oxygen criteria are not to be exceeded at a frequency of more than once every ten years on average.
- Note 4: No ~~anthropogenic~~ further point or nonpoint heat source inputs are allowed downstream of the Lake Chelan Dam outlet to the Chelan River confluence with the Columbia River.

Reason for change: During the comment period, Ecology received a comment from EPA recommending that Ecology modify the temperature criteria associated with the highest attainable use to only include the natural conditions of the river and not additional temperature increases associated with anthropogenic sources, such as anticipated climate change effects. In response, we removed the allowance for climate change effects. We have revised the 7-DADMax increase from 3.75°C to 3.5°C in Reaches 1-3 and in Reach 4, have revised the 7-DADMax increase from 1.25°C to 1.2°C. In the special temperature provision we changed “no anthropogenic heat inputs” to “no further point or nonpoint heat inputs,” to specify what is controlled by state regulation.

List of Commenters and Response to Comments

List of entities that submitted a comment

We accepted comments from March 24, 2021 until May 21, 2021. Each commenter is identified by an identification code. Comments identified with an “E” indicate we received the comment through our online eComments system.

Table 1 List of commenters by affiliation.

Affiliation	Commenter	Identification Code
Columbia River Inter-Tribal Fish Commission	Julie Carter	E-1
Confederated Tribes of the Colville Reservation	Douglas Marconi	E-2
Individual	Kim Fischer	E-3
Public Utility District No. 1 of Chelan County	Marcie Clement	E-4

Affiliation	Commenter	Identification Code
US Environmental Protection Agency	Lindsay Guzzo	E-5
Yakama Nation	Delano Saluskin	E-6

Organization of comments

We arranged the comments alphabetically by affiliation of commenter (Table 1).

Under each commenter, we have included each comment verbatim, taken from the comment letter, except in cases of spelling errors or clarification. Responses to each comment are directly below each comment. See Appendix B for each comment we received in its entirety.

Comments and Responses

E-1 – Columbia River Inter-Tribal Fish Commission

Comment E.1.1

The Proposal Sets a Precedent That Conflicts with the Purpose of the Clean Water Act.

Comment E.1.1.A

This proposal allows for removal of a designated use, a diminishment of another designated use, and downgrade of water quality criteria in an already water quality-compromised watershed, merely for the benefit of Chelan PUD. In fact, Ecology, in its cost-benefit analysis document, points out that the proposal will result in “benefits of avoided noncompliance for Chelan PUD” See Publication 21-10-005. Yet, Ecology does not factor the cost to fisheries, water quality, or the environment. The precedent of allowing a regulated discharger to change uses and downgrade its obligations, even though it has a direct impact on those conditions, is troubling. It is also contrary to the purpose and intent of the Clean Water Act (CWA) to “restore and maintain the biological integrity of the Nation’s waters” or Washington State’s goal to “retain and secure high quality for all waters of the state.” § 90.48 RCW.

Ecology Response

The regulatory analysis conducted by staff economists and required under the Washington Administrative Procedure Act (APA; RCW 34.05.328(1)(d)) requires Ecology to evaluate significant legislative rules to “determine that the probable benefits of the rule are greater than its probable costs. This analysis includes all considerations including costs to Chelan PUD and ratepayers. The regulatory analysis is a requirement of all state rulemakings. The benefits to Chelan PUD would be a result of the rulemaking process that must be included in the regulatory analysis but is not one of the supporting bases of the UAA or rulemaking.

Federal rules regulating the UAA process are described at 40 CFR 131.10(g). The EPA specifically developed the use attainability analysis (UAA) as a tool to modify designated uses that are not appropriately assigned. The federal rules recognize that some water bodies are assigned designated uses without site-specific information. This occurred in Washington in many rivers, including the Chelan River, which was assigned the designated use of spawning, rearing, and migration to a dry riverbed and impassable reach for fish even when rewatered. Since

rewatering of the Chelan River, the Chelan PUD has collected site-specific information that has evaluated the aquatic life and habitat potential of the Chelan River. The data collected has indicated that the original designated use was not appropriately assigned but can now be set to match the attained uses that have resulted from the rewatering and restoration projects.

The proposed rule does not affect current conditions that include a viable reproducing salmonid population; rather the rule is tailored to protect those uses while reflecting the natural limitations of the waterbody. This proposed change more accurately defines the aquatic life uses in the Chelan River and does not change the fact that salmonids currently spawn and rear in the Chelan River and are expected to into the foreseeable future. The Chelan River is largely influenced by Lake Chelan water quality. The aquatic life uses and associated water quality criteria are intended to protect the highest attainable uses and conditions that support those uses.

Comment E.1.2

Ecology cannot remove a use that is existing.

Comment E.1.2.A

A UAA allows states to remove a “designated use” (or set sub-categories of a use) if that use is not feasibly attainable. 40 CFR § 131.10(g). Designated uses are different from “existing uses” which cannot be removed. 40 CFR § 131.3. Furthermore, the CWA and Washington State’s antidegradation rule requires the state to maintain and protect existing uses. WAC 173-201A-310(1). As such, Ecology must set appropriate water quality criteria to protect the most sensitive existing uses of the Chelan River. It is unclear that Ecology has adequately researched whether salmonid spawning in the Chelan River is an existing use. An existing use is one that was “actually attained in the water body on or after November 28, 1975.” 40 CFR § 131.1(e). Based on the available documents, CRITFC cannot find evidence to support Ecology’s assertion that salmonid spawning was not an existing use. On the other hand, there is evidence that salmonid spawning occurred in the 1980s and 1990s.

Ecology Response

This rule will change the aquatic life designated use in the Chelan River from “salmonid spawning, rearing, and migration,” which previously applied to all sections of the river, to “migration for naturally limited waters” in the upper reaches of the river (reaches 1-3), and to “salmonid spawning, rearing, and migration for naturally limited waters” to the lower part of the river (reach 4).

The previously assigned designated uses for the Chelan River were set by default in 1970, without regard to whether such uses were actually existing uses in the Chelan River. Instead, the Chelan River, which was dry most of the year due to flow diversion to the Chelan powerhouse, was designated with salmon spawning, rearing, and migration (formerly described as Class A aquatic life uses). This default designation was applied to any tributary to a Class A water. Since the Chelan River is a tributary to the Columbia River, a Class A water, it received that designation. Existing uses are different from designated uses in that they refer only to those uses that have actually been attained since November 28, 1975. A state has the authority to modify a designated use through the UAA process as long as existing uses of the waterbody are maintained.

The Chelan River remained mostly dry for over 80 years prior to the last dam relicensing effort, although flows from the Chelan powerhouse provided some habitat at the lowest end of the

natural river channel. As a requirement of the relicensing and the 401 WQC, Chelan PUD started rewatering the historic Chelan River channel in 2009. Chelan PUD also began to implement a series of measures designed to achieve biological objectives outlined in the 401 WQC. These objectives sought to improve aquatic habitat and fisheries in addition to that which the returned flows could provide.

It is accurate that spawning and rearing have been observed in tailrace waters of the Chelan hydroelectric powerhouse since November 1975; the condition of the tailrace waters are not affected by this rulemaking which addresses the formerly dry Chelan River courses, including the restored habitat channel (referred to in this rulemaking as Reach 4). However, as a product of Chelan PUD's restoration efforts and the return of river flows, salmonids spawn and rear in the formerly dry, historic channel of the Chelan River. Salmonid spawning, rearing, and migration are now considered existing uses in Reach 4 of the Chelan River since the completion and maturation of the spawning habitat channel. However, these uses are conditioned as 'naturally limited' due to water temperatures that regularly exceed the temperature criteria known to provide full protection for salmonid spawning and rearing. The high seasonal temperatures in the Chelan River originate from the influence that Lake Chelan has on river conditions as well as solar radiation. These temperatures preclude the designated use of **full protection** of salmonid spawning and rearing because temperatures exceeding 17.5°C have the potential to result in sub-lethal effects that may affect behavior, growth, and reproduction (EPA, 2003).

As indicated in the study by R2 and IA (2000), natural fish passage barriers exist above Reach 4 and preclude the migration of salmonids above this point. There is a strong support that the salmonid spawning and rearing use is not existing in reaches 1-3 due to migration barriers and limited habitat. Spawning or incubation for salmonids is limited in reaches 1-3 based on substrate type, prey availability, limited riparian vegetation, limited large woody debris, limited productivity, and high water temperatures.

In this rule, we have acknowledged that the current designated use of salmonid spawning, rearing, and migration is naturally limited by water temperatures. This designated use change more accurately defines the aquatic life uses in the previously dry Chelan River channel and does not conflict with the recognition that salmonids will continue to spawn and rear in Reach 4 of the Chelan River.

Existing uses can include those not optimally supported. If there is reason to believe that a partially supported use was once fully supported based on natural conditions, then water quality standards should not change if there are reasonable and feasible actions to restore the waterbody. However, in the case of the Chelan River, Lake Chelan has surface water temperatures that regularly exceed 20°C. These warm surface waters feed the Chelan River. Therefore, seasonal warm temperatures and flow fluctuations based on lake elevation have existed historically.

Reasonable and feasible efforts to reduce water temperatures in Chelan River have been considered during the FERC relicensing settlement negotiations. During the implementation of Chelan PUD's dam compliance schedule in their WQC, water quality and habitat potential of the river were evaluated. Based on the studies and data collected, we have concluded that the salmon spawning, rearing, and migration use is an inaccurate designation for reaches 1-3, which can only support limited downstream migration. For Reach 4, the data supports a designation of limited spawning, rearing, and migration. These uses are not fully supported for Reach 4 due to natural temperature conditions.

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

R2 and IA (R2 Resource Consultants, and Ichthyological Associates, Inc.). 2000. *Bypass reach (gorge) flow releases study report (final)*. Lake Chelan Hydroelectric Project, FERC Project No. 637. Report prepared for Public Utility District No. 1 of Chelan County, Wenatchee, Washington.

Comment E.1.3

Ecology's Proposed Site-Specific Criteria is Inadequate to Support Existing Uses.

Comment E.1.3.A

According to our assessments, the site-specific criterion downgrade is not warranted, and, in fact, the new criteria will not adequately support the current existing uses. Furthermore, Chelan PUD has not implemented all reasonable and feasible measures to improve the temperatures of Reach 4 of the Chelan River.

Ecology Response

Based on the influence of Lake Chelan on the water quality of the Chelan River, during particular times of the year the current temperature criterion of 17.5°C will not be met. Lake Chelan water temperatures often exceed 20°C in any given year. These water temperatures translate to elevated temperatures for the Chelan River. We have assigned temperature criteria that include an allowable amount of warming over the baseline water temperatures that originate from Lake Chelan. The allowable warming component of the proposed temperature criterion is based on monitoring data and is attributed to solar radiation exposure over the distance of the river. If the highest attainable uses are supported now, they should be supported into the future based on the associated criteria and the special temperature provision that limits thermal inputs to natural sources. We believe it is appropriate to assign criteria based on natural thermal inputs (such as solar radiation) and influences from Lake Chelan, while adding a special provision to limit point and non-point source thermal inputs.

During the FERC relicensing settlement negotiations for the 2003 Lake Chelan Settlement Agreement (Chelan PUD, 2003), the Natural Science Working Group (NSWG) considered several options to reduce water temperatures, including drawing cool water from the depths of Lake Chelan, groundwater augmentation, and increasing river flows. The NSWG did not consider these options reasonable and feasible in the FERC Settlement Agreement (Chelan PUD, 2003). The NSWG consisted of NOAA Fisheries, Washington Department of Fish and Wildlife, U.S. Fish and Wildlife Service, U.S. Forest Service, National Park Service, Ecology, Colville Confederated Tribes, Yakama Nation, Lake Chelan Sportsman's Association, People for Lake Chelan, Chelan PUD, and other interested parties.

The NSWG recognized that natural physical conditions, influence of water temperatures originating from Lake Chelan, and low productivity, could limit the suitability of habitat in the Chelan River. Ecology engaged in and concurred with the subsequent decisions of the NSWG and therefore determined that all reasonable and feasible actions have been taken while the WQC and this rulemaking will ensure that actions will continue to support the existing and attained uses in all reaches of the Chelan River.

Chelan PUD (Public Utility District No. 1 of Chelan County). 2003. Lake Chelan Hydroelectric Project Comprehensive Settlement Agreement, Final, Lake Chelan Hydroelectric Project, FERC Project No. 637.

Comment E.1.3.B

Thus, what we see in the UAA is a request for a site-specific criterion for temperature that closely follows the current operating conditions and not the natural flow regime of the river, pre or post-development. When lake discharges are used as surrogate for natural Chelan River flows (e.g., non-diverted powerhouse flows), it seems reasonable, then, to expect temperature benefits like those observed in the QUAL-2K modeled simulations. Thus, in the absence of more robust pre-development modeling, it is unreasonable to accept a site-specific criterion for temperature that resembles current operating conditions without considering natural free-flowing conditions.

Ecology Response

Given that the first Lake Chelan Dam was built in the 1890s, we do not have historical Chelan River flow information. We recognize that the presence of the Lake Chelan Dam has likely modified the Chelan River flow regime. Currently, Chelan River flows fluctuate depending on lake levels, snowmelt, and generation capacity.

Higher minimum instream flows have the potential to reduce water temperatures but may have consequences for in-stream habitat. Higher minimum instream flows were eliminated as a possibility to reduce water temperatures in the Chelan River because it reduced the amount of useable habitat area, produced greater scour under high flows, and limited the already minimal primary productivity that is essential to support aquatic life. Furthermore, higher flows would lead to more heat input into the Columbia River due to the increase in volume of water (Chelan PUD, 2003). The increased flows would also increase nighttime temperatures and reduce cold-water refuges. The flow increases examined in the QUAL-2K model would not reduce water temperatures to levels that are optimal for salmonids and would reduce useable habitat.

Before the construction of the Lake Chelan Dam, there was a high likelihood that the few upper feet of the surface waters of the Wapato Basin fed the Chelan River, especially during summer months. This is based on data that shows that Lake Chelan Dam increased Lake Chelan elevation by 20 feet. This increased the depth of the southernmost part of Lake Chelan near the outlet to the Chelan River. This increased depth allows the low-level outlet to take advantage of the cooler lower level waters when a temperature to depth differential is present. The site-specific criteria developed are based on the thermal regime that supports the highest attainable use. Modeling indicates that while higher flows may reduce water temperature, habitat quality would decrease. The minimum instream flows strike a balance between usable spawning and rearing habitat and water temperatures that are conducive to maintaining the highest attainable use.

The degree of modeling, biological objectives, instream flows, and restoration activities were negotiated during the settlement agreement for the dam relicensing and subsequently incorporated into the WQC. Stakeholders and tribes have been involved in each step of this process and have provided input, ranging from the Natural Science Working Group during settlement agreements to the Chelan River Fishery Forum. We do not believe there is a current need to modify the 401 WQC to require additional modeling unless new information is presented.

Comment E.1.3.C

The bar for issuance of the first-ever site-specific temperature criteria in the state of Washington should be onerously high. Again, this UAA proposes a site-specific criterion for temperature that closely resembles the current operating conditions without an exhaustive analysis of predevelopment or natural flow conditions. Ecology should seriously consider the effect of setting a precedent where the applicant can set water quality criteria according to current conditions, not natural conditions. We do not feel that this analysis meets the high bar necessary for setting a rule-making precedent of that kind.

Ecology Response

Site-specific criteria for temperatures that are not based on species-optimal conditions have been included in the water quality standards since their development in the 1970s. The Columbia, Grand Ronde, Palouse, Pend Oreille, Skagit, Snake, Spokane, and Yakima rivers have site-specific criteria established for temperature in recognition that biologically based criteria developed for optimal species conditions would not be naturally met. The Chelan River is similar to these other waterbodies in that the natural conditions of the river preclude full attainment of the WQS. Warming conditions in the surface of Lake Chelan would have resulted in late summer warming of the Chelan River. We believe the UAA submittal by Chelan PUD included a robust amount of data and analysis that occurred over almost a decade of work and provides sufficient information to support the site-specific criteria that Ecology modified after requesting further data from the Chelan PUD. Therefore, we used the best available information to develop the proposed water quality criteria and minimum instream flows for Chelan River.

The Lake Chelan Dam was first built in the 1890s. We are unaware of historical pre-dam flow condition information in the Chelan River. In the absence of the dam, Wapato Basin and the branching arm of the basin that leads to the Chelan River would be shallower by approximately 21 feet (Kendra and Singleton, 1987), and therefore, the water would be more vulnerable to solar heating and less ability to benefit from temperature differences as depth increases. Thus, in the absence of the project, warmer surface waters of the lake would have resulted in naturally water temperatures in the river similar to or warmer than current temperatures.

The minimum instream flows were discussed and set during the FERC relicensing settlement agreement with the Natural Science Working Group³ (NSWG), as described in Ecology's response to Comment E.1.3.B. We do not have any additional information that suggests we should reevaluate minimum instream flows nor that an amendment to the Lake Chelan Dam WQC should occur.

Comment E.1.4

The Proposed Criteria Conflicts with Ecology's Position on the Columbia River TMDL.

³ The NSWG consisted of NOAA Fisheries, Washington Department of Fish and Wildlife, U.S. Fish and Wildlife Service, U.S. Forest Service, National Park Service, Ecology, Colville Confederated Tribes, Yakama Nation, Lake Chelan Sportsman's Association, People for Lake Chelan, Chelan PUD, and other interested parties.

Comment E.1.4.A

The proposed site-specific criteria allowance for temperature in the Chelan River is contrary to the position that Ecology takes in its August 2020 letter to EPA on the TMDL for temperature in the Columbia and lower Snake rivers.

Ecology Response

The proposed rule does not change the current thermal regime in the Chelan River from what has been existing since minimum instream flows were established in 2009. The proposed water quality criteria are intended to emulate natural thermal conditions of the Chelan River. The water temperature at the confluence of the Columbia and Chelan rivers is largely driven by water that flows through the Lake Chelan hydropower dam. This water is generally cooler in temperature, because it moves from a cooler, deep-water outlet from Lake Chelan through an underground pipe to the powerhouse of the dam. During implementation of the FERC license and as a requirement of the 401 WQC, Chelan PUD has implemented a series of measures to restore the Chelan River, improve water quality, determine the potential of the Chelan River to support aquatic life, and to achieve the biological objectives identified by the NSWG. Ecology's comment letter to EPA regarding the Columbia and Snake River Temperature TMDL and discussion regarding the appropriateness of a UAA is specific to that TMDL and do not reflect this Chelan UAA process.

Comment E.1.5

Ecology Should Consider the Yakama Nation Proposed Mitigation Options.

Comment E.1.5.A

In addition to using higher flow options, Yakama Nation has proposed two possible mitigation actions, which need to be more fully explored. The first is building a pipeline connecting the penstock intake to water cooler than is available at the current intake location. The second is the use of groundwater to cool Reach 4. The pipeline option is summarily dismissed by Chelan PUD because of a limited ability to provide cooler water and cost. The groundwater option was eliminated because of a low probability that enough groundwater would be available. It is premature to take these alternatives off the table. Because the requests of UAA are extraordinary we feel these mitigation options should be more fully explored and the costs and benefits of these options shared.

Ecology Response

During the FERC relicensing settlement negotiations, the Natural Science Working Group⁴ (NSWG) considered several options to reduce water temperatures including drawing cool water from the depths of Lake Chelan, groundwater augmentation, and increasing river flows. The NSWG did not consider these options reasonable and feasible in the 2003 Lake Chelan Settlement Agreement (Chelan PUD, 2003). The NSWG recognized that the natural physical conditions, the influence of water temperatures originating from Lake Chelan, and low productivity, could limit the suitability of habitat in the Chelan River. These limitations have not

⁴ The NSWG consisted of NOAA Fisheries, Washington Department of Fish and Wildlife, U.S. Fish and Wildlife Service, U.S. Forest Service, National Park Service, Ecology, Colville Confederated Tribes, Yakama Nation, Lake Chelan Sportsman's Association, People for Lake Chelan, Chelan PUD, and other interested parties.

changed, and there is no new information to suggest that there are additional measures that are feasible and that would result in any improvement to biological objectives or water quality.

Chelan PUD has met the biological objectives for fish survival and habitat in the Chelan River as part of their 401 WQC. The Chelan River remains a productive salmonid bearing stream.

This UAA is based, in part, on factor 1 of the EPA UAA supporting factor conditions [CFR 131.10(g)(1)] which state that a UAA can be supported if the naturally occurring pollutant concentration prevents the attainment of the use. This factor is grounded in the basis that the optimal conditions of waterbodies is to attain the natural condition of the waters. This factor does not require augmentation of conditions, in this case cooling water further, in order to create conditions better than those which would exist naturally.

Ecology is not seeking the facility to create conditions or augment designated uses that are better than the conditions that would exist without the facility.

E-2 – Confederated Tribes of the Colville Reservation

Comment E-2.1

It's important to acknowledge that anthropogenic development on Lake Chelan and the surrounding lake edge shoreline have negatively affected water quality. Development in the shoreline has reduced or extinguished lake shoreline habitat features. The negative impacts have contributed to increased water temperatures. Continued, un-mitigated lake/shoreline development will decrease lake and river water quality. ETD agrees that, "No anthropogenic heat source inputs are allowed downstream of the Lake Chelan Dam outlet to the Chelan River confluence with the Columbia River." Additionally, consideration is needed for all future development on Lake Chelan (e.g. boat docks), and on the lake shoreline.

Ecology Response

The scope of this rulemaking is to address the Chelan River and impacts from the dam and hydroelectric project area. We agree that development and changes to the shoreline of the lake may influence the lake conditions. However, these lake activities, if negatively impacting water quality, are required to meet state and federal requirements through other regulatory processes.

Comment E-2.2

There is a concern that if this proposal is approved then a precedent will be set to further downgrade water quality standards.

Ecology Response

We acknowledge your concern of setting a precedent for using the use attainability analysis tool. A UAA is a water quality tool in the Clean Water Act that is available to modify designated uses when they are inappropriately assigned. The UAA tool requires a high degree of biological, chemical, and physical data. The application submitted by Chelan PUD contained a robust amount of information and evidence that the Chelan River was limited by natural features that limit the aquatic life and habitat potential. This information was collected after years of restoration work to restore the Chelan River. Any future UAA applications will also be held to a high standard in regards to scientific data requirements and will need to include a rigorous

assessment of the water body. Each UAA must stand alone on its own merit, and the outcome of this process will not affect the rigor required for any subsequent UAA review.

Comment E-2.3

By definition the main change acknowledges limitations with the physical, biological, and chemical aspects of the river which is not fixable in my opinion due to the extenuating circumstance with this water system (i.e. without the dam no water would be present in the summer and fall).

Ecology Response

We agree that the natural physical, biological, and chemical aspects of the river limit the aquatic life and habitat potential.

E-3 – Individual, Kim Fischer

Comment E.3.1

I'm trying to make sense if the wording on this proposal. It's vague at best, but what I gather is that the protection of the mid to upper River areas is deemed to be "hard" ... so the easy thing to do is change the designation to something less stringent.

If so, I don't support that at all. Salmon (and also orca who need the salmon) need all the help they can get to survive the never ending onslaught of human interference. We must begin doing hard things and right our environmental wrongs before it's too late. So I disagree with renaming and/ or redesignating - instead please protect the habitat - do the hard but right things.

Ecology Response

The conditions of the upper river (referred to as reaches 1-3 in the Technical Support Document) contain natural physical features that make upstream migration not possible. Therefore, the designated use assigned (spawning and migration) for salmon life stages is not an appropriate use designation. This is, in part, why Ecology is supporting a revision to the use designations.

E-4 – Public Utility District No. 1 of Chelan County

Comment E.4.1

Clarification on the use designation and criteria that apply to the tailrace and the high-flow sections of Reach 4 in Table 602.

Ecology Response

We have clarified in the rule that the proposed water quality criteria in Reach 4 applies to the Chelan River and not tailrace waters by adding a narrative statement for tailrace waters. The 7-DADMax increase in Reach 4 is based on monitoring data that was used to determine the natural warming that occurs over the distance of the reach due to solar radiation. We know that due to tailrace waters not being exposed to warming effects in the Chelan River reaches, tailrace waters will be at least as cool as the river temperatures because water is transported from Lake Chelan through an underground tunnel. We have clarified that the condition of these cooler tailrace waters must be maintained, by adding a requirement in the rule language that tailrace waters

must be cooler than Chelan River when river temperatures are greater than 17.5°C as a daily maximum at the Reach 4 compliance point.

Comment E.4.2

Chelan PUD is concerned, however, that the existing powerhouse flows to the tailrace and the supplemental pump back flows from the tailrace to the habitat channel to support spawning might be considered anthropogenic sources prohibited by footnote 4, even though these existing flows are authorized or required under the existing FERC license and Clean Water Act Section 401 Water Quality Certification. We request clarification that the reference to “anthropogenic heat source inputs” in Footnote 4 does not include these existing sources.

Ecology Response

We have clarified in the rule that the special temperature provision is intended to limit any further point and non-point heat source inputs beyond what is considered existing. We have further clarified the meaning of this special provision in regards to operations in the implementation plan.

Comment E.4.3

We request clarification that the saturation criteria proposed in Table 602 apply only when DO is lower than 8 mg/L.

Ecology Response

The DO criteria are structured in a way that either 8.0 mg/L or the DO saturation criteria is applicable. The biologically based (8.0 mg/L) and DO saturation criteria do not apply concurrently, rather DO compliance with either criteria is sufficient. The applicable criterion depends on the environmental conditions driving DO saturation at any given time.

Comment E.4.4

Chapter 4 (Page 26) of the Preliminary Regulatory Analyses document indicates that “During the federal relicensing, Chelan PUD addressed the potential impacts of various methods to increase river flows and indicated they would be too costly relative to potential beneficial impact...”. As listed in the first bullet that follows this statement in the document, cost was not the primary reason the higher flows were eliminated. Rather, the higher flows were shown to hinder the attainment of the biological objectives because of the reduction in useable biological habitat. The current flows were determined to be optimal during the 10-year adaptive management studies that were overseen by the Chelan River Fishery Forum, which included representatives from Ecology, Washington State Department of Fish and Wildlife, federal fish agencies, Tribes, and other stakeholders. We request that Ecology include a clarification so that the statement cited above is not misconstrued as cost being the driver for eliminating higher flows.

Ecology Response

The analysis of benefits to Chelan PUD are a result of the rulemaking process that must be included in the regulatory analysis but is not one of the supporting bases of the UAA or rulemaking. The regulatory analyses conducted by our economist and required under the Washington Administrative Procedure Act (APA; RCW 34.05.328(1)(d)) requires Ecology to evaluate significant legislative rules to “determine that the probable benefits of the rule are greater than its probable costs.” This analysis includes all considerations, including costs to

Chelan PUD and ratepayers. The regulatory analyses are a requirement of all state rulemakings. ‘Costs’ are intended to include broader negative impacts (not limited to monetary impacts), and we understand that the Draft Regulatory Analyses may have inferred only monetary costs were considered. We have corrected this in the Final Regulatory Analyses (Publication 21-10-034).

E-5 – US Environmental Protection Agency

Comment E.5.1

EPA recommends revising the TSD [Technical Support Document] to clarify that the proposed criteria is to protect the Highest Attainable Use rather than the process to set site specific criteria as describe in WAC 173-201A-430.

Ecology Response

Thank you for the clarification. We understand that there is a distinction between determining the highest attainable use and developing criteria to protect that use and site-specific criteria as provided by WAC 173-201A-430. We have revised the rulemaking documents to indicate that we are changing the designated uses and “associated criteria” with those uses.

Comment E.5.2

Because the factor used to determine the need for a use change is at 40 CFR 131.10(g)(1), Naturally occurring pollutant concentrations prevent the attainment of the use, the HAU for the waterbody should only include the naturally warmer temperatures and not additional temperature increases associated with anthropogenic sources, such as climate change effects. EPA recommends modifying the HAU to only include the natural effects on the river.

Ecology Response

We have revised the allowable temperature increases due to solar radiation in reaches 1-3 and Reaches 4, while eliminating the consideration for future climate change. In reaches 1-3, we have revised the 7-DADMax increase from 3.75°C to 3.60°C and in Reach 4, have revised the 7-DADMax increase from 1.25°C to 1.20°C. The 7-DADMax increases for reaches 1-3 and Reach 4 now align with the extent of warming observed in the monitoring data for both water body segments.

Comment E.5.3

Figure citations are off in the TSD starting with Figure 5. Please revise to ensure accuracy.

Ecology Response

We have corrected the figure citations.

Comment E.5.4

Table 2, Water quality criteria for the Chelan River (WAC 173-201A-200), states the duration for temperature as “7-day average of the daily minimum.” Please revise to say, “7-day average of the daily maximum.”

Ecology Response

We have made this correction.

Comment E.5.5

Table 4, Current and proposed aquatic life uses for the Chelan River. Column heading “Proposed Existing Aquatic Life Use2,” should be changed to say, “Proposed Aquatic Life Use2” as the draft language could cause confusion over what is “attainable” vs what is an “existing” use.

Ecology Response

We have made this correction.

E-6 – Yakama Nation

Comment E.6.1

Ecology has inappropriately deferred to Chelan PUD’s interests, analyses, and conclusions.

Comment E.6.1.A

EPA regulation 40 CFR Part 131, Subpart B states that the state or tribe is the entity that conducts the UAA analysis. Regulations do not contemplate UAA by regulated entities or any other non-state actors. The WAC states that the state review and make decisions on UAA submitted by non-state actors. Washington’s approach invites significant conflicts of interest, wherein dischargers or other regulated entities can submit skewed UAAs to lessen their compliance burden. Ecology can avoid conflicts of interest by meaningfully scrutinizing’s UAA’s by making its own independent analyses.

Ecology Response

EPA’s regulations authorize a state to remove or revise a designated use (see generally 40 CFR 131.10). Subject to limited exceptions, the federal regulations require that a change in designated use be supported by a use attainability analysis (UAA). EPA’s regulations at 40 CFR 131.10(g) state “...if the State conducts a use attainability analysis...” and thus any UAA Ecology submits to support the use change is owned by Washington and is Ecology’s responsibility. However, Ecology has the flexibility to consider data and an initial UAA proposal completed by any other entity in determining whether to revise a designated use.

Accordingly, Washington’s water quality regulations authorize a non-State entity to submit a proposed UAA that includes data to support a use change (WAC 173-201A-440). Following a UAA submittal, it is Ecology’s responsibility to analyze the UAA submittal and determine if it should proceed to the rulemaking stage (*Id.*). Ecology makes an independent determination whether modification of Washington’s water quality standards, including revision of any designated uses, is warranted and whether the UAA supports such a revision. Ecology has the ability to supplement or revise the initial UAA submittal request, if needed. As such, once Ecology adopts the use change following the water quality standards rulemaking process, Ecology will have followed the federal and state regulations through this rulemaking process.

The data that forms the basis for the proposed rulemaking is primarily based on the WQC that Ecology issued for the Lake Chelan hydroelectric project. Several of the studies conducted by Chelan PUD were completed by independent consultants selected by the participating members of the Chelan River Fishery Forum and not by Chelan PUD alone. The Forum consisted of

members from the initial Natural Science Working Group⁵ (NSWG) and provided review and oversight of studies conducted. Ecology has worked with Chelan PUD on the implementation of their 401 WQC for over a decade and have regularly evaluated progress achieving the biological objectives, restoration activities, and reviewing monitoring data.

The UAA application submitted by Chelan PUD summarizes the information collected as part of the Lake Chelan 401 WQC and forms the basis for the proposed rulemaking. We have analyzed the submittal and the data provided, requested additional temperature and dissolved oxygen data, inquired further on mitigation measures for river temperatures, and have made appropriate changes to Chelan PUD's request. Given that Ecology has evaluated Chelan PUD's work throughout this process and has independently analyzed Chelan PUD's submittal, we do not agree that the UAA request or proposal has been biased.

Ecology evaluated Chelan PUD's request for a UAA and site-specific criteria and modified several components based on our analysis. Changes to Chelan PUD's request include revisions to the allowable temperature increase, the magnitude and duration component of the temperature criteria, magnitude of the dissolved oxygen criteria, changes to the aquatic life use designations, and the addition of a special provision that limits point and non-point source thermal inputs into Chelan River. Ecology considers the changes we have made based on our independent review and analysis to Chelan PUD's request as substantial.

Comment E.6.1.B

Ecology has not meaningfully scrutinized Chelan PUD's submission but rather, defers to Chelan PUD's interests, analyses, and conclusions. For example, the benefits of the Proposal, per Ecology, are limited to avoiding noncompliance for Chelan PUD and ongoing costs of Chelan PUD and their ratepayers as well as increased uncertainty around future energy generation and retail prices. Ecology disregards potential methods to increase river flow and bring Chelan PUD into compliance with current standards because Chelan PUD indicated they would be too costly relative to potential beneficial impact.

Ecology Response

Ecology has fully considered Chelan PUD's UAA submission. In some areas, we disagreed with the submitted material and in other areas requested further data and clarification to properly move forward with this rule consideration.

Regarding the example of 'costs':

The analysis of benefits to Chelan PUD are a result of the rulemaking process that must be included in the regulatory analysis but is not one of the supporting bases of the UAA or rulemaking. The regulatory analyses conducted by Ecology's economist are required under the Washington Administrative Procedure Act (APA; RCW 34.05.328(1)(d)). The APA requires Ecology to evaluate significant legislative rules to "determine that the probable benefits of the rule are greater than its probable costs." This analysis includes all considerations, including costs to Chelan PUD and ratepayers. The regulatory analyses are a requirement of all state rulemakings. 'Costs' are intended to include broader negative impacts, and are not limited to

⁵ Regular participants in the Chelan River Fishery Forum included: NOAA Fisheries, Washington Department of Fish and Wildlife, U.S. Fish and Wildlife Service, U.S. Forest Service, National Park Service, Department of Ecology, Colville Confederated Tribes, and Chelan PUD.

monetary impacts. We understand that the Preliminary Regulatory Analyses may have inferred only monetary costs were considered. We have corrected this in the Final Regulatory Analyses (Publication 21-10-034).

Regarding the statement that Ecology disregards potential methods to increase river flow:

Methods to increase flows have been thoroughly considered. Naturally occurring high water temperatures from Lake Chelan create conditions in which the Chelan River would not meet temperature criteria during particular times of the year. Chelan PUD and the Chelan River Fishery Forum have considered measures to reduce water temperature in the Chelan River by increasing flows. Minimum instream flows were set during the issuance of the 401 water quality certification during the relicensing effort for the Lake Chelan hydroelectric project. Higher flows were modeled and predicted to lower river temperatures slightly during some period of time but there were several concerns with increasing flows. These concerns include reducing usable habitat for aquatic life, increased scour, increased erosion, and reducing cold water refugia. Furthermore, the analysis showed that increased flows could raise nighttime water temperatures.

Increased water flows from Chelan River would also result in a net increase to thermal loading into the Columbia River. Waters that flow to through the penstock, powerhouse and then out through the tailrace remain cooler than the water that is warmed through the Chelan River channel. Any additional flow moved from the penstock flows to the river would result in a net increase in temperature as those the tailrace and habitat channel flows merge just before flowing to the Columbia River. Thus, while we predict a minor thermal benefit to the Chelan River if flows in the channel were increased, habitat impacts and a net warming of water to the Columbia River would result.

During the relicensing settlement negotiations for the 2003 Lake Chelan Settlement Agreement (Chelan PUD, 2003), the Natural Science Working Group (NSWG) considered several options to reduce water temperatures, including drawing cool water from the depths of Lake Chelan, groundwater augmentation, and increasing river flows. The NSWG did not consider these options reasonable and feasible in the Settlement Agreement (Chelan PUD, 2003). The NSWG consisted of NOAA Fisheries, Washington Department of Fish and Wildlife, U.S. Fish and Wildlife Service, U.S. Forest Service, National Park Service, Ecology, Colville Confederated Tribes, Yakama Nation, Lake Chelan Sportsman's Association, People for Lake Chelan, Chelan PUD, and other interested parties.

The NSWG recognized that natural physical conditions, influence of water temperatures originating from Lake Chelan, and low productivity could limit the suitability of habitat in the Chelan River. Ecology engaged in and concur with the subsequent decisions of the NSWG and therefore determined that all reasonable and feasible actions have been taken. The 401 water quality certification (WQC) and this rulemaking will ensure that those actions will continue to support the attained uses in all reaches of the Chelan River. At this time, there is no additional information available that suggests that these options should be revisited.

The UAA for Reach 4 is based on factor 1 of the EPA UAA supporting factor conditions [CFR 131.10(g)(1)], which state that a UAA can be supported if the naturally occurring pollutant concentration prevents the attainment of the use. This factor is grounded in the basis that the optimal condition of a waterbody is to attain the natural condition of the water. This factor does not support the requirement to augment conditions, in this case cooling water further, to create

conditions better than those which would exist naturally, including those associated with the current designated use.

Chelan PUD (Public Utility District No. 1 of Chelan County). 2003. Lake Chelan Hydroelectric Project Comprehensive Settlement Agreement, Final, Lake Chelan Hydroelectric Project, FERC Project No. 637.

Comment E.6.2

The proposal is not warranted or proper under Chelan PUD's Section 401 WQC and other CWA requirements.

Comment E.6.2.A

Ecology has not meaningfully evaluated whether Chelan PUD implemented all known, reasonable, and feasible measures to achieve biological objectives in Chelan River.

Ecology Response

During the FERC License settlement negotiations, the NSWG considered several options to reduce water temperatures including drawing cool water from the depths of Lake Chelan, groundwater augmentation, and increasing river flows. The NSWG, including Ecology, did not consider these options reasonable and feasible during the 2003 Lake Chelan Settlement Agreement (Chelan PUD, 2003). At this time, no additional information is presented that suggests that these options should be revisited. The participating NSWG members recognized that the natural physical conditions, the influence of water temperatures originating from Lake Chelan, and low productivity, could limit the suitability of habitat in the Chelan River. These limitations have not changed, and there is no new information to suggest that there are additional measures that are feasible and that would result in any improvement to biological objectives or water quality. The biological objectives identified in the 401 WQC accurately represent the highest attainable use. Ecology is not seeking the facility to create conditions or augment designated uses that are better than the conditions that would exist without the facility.

Comment E.6.2.B

Ecology has not meaningfully evaluated whether salmonid spawning, rearing, and migration is an existing use. The implementation plan states that salmonid spawning, rearing, and migration were not previously existing uses and were applied without review of local conditions. Ecology states that salmonid spawning, rearing, and migration has occurred at least in a segment of Chelan River since Nov. 1975 but not to the extent that the use was actually attained. The standard for actual attainment is unclear. Spawning and emergence outside of summer, as well as rearing, and migration have occurred in at least some reaches of the Chelan River since 1975. This suggests that salmonid spawning, rearing, and migration is an existing use. Ecology's 2004 guidance states that existing uses include those are not optimally supported but still present in the waterbody.

Ecology Response:

As explained in the Technical Support Document, the designated uses for the Chelan River were set by default in 1970, without regard to whether such uses were actually existing uses in the Chelan River. Instead, the Chelan River, which was dry most of the year, was designated with salmon spawning, rearing, and migration (formerly described as Class A aquatic life uses). This default designation was applied to any tributary to a Class A water. Since the Chelan River is a

tributary to the Columbia River, a Class A water, the Chelan River received the Class a designation. Existing uses are different from designated uses in that they refer only to those uses that have actually been attained since November 28, 1975. A state has the authority to modify designated uses through the UAA process as long as existing uses of the waterbody are maintained.

The Chelan River remained mostly dry for over 80 years prior to the last dam relicensing effort, although flows from the Chelan powerhouse provided some habitat at the lowest end of the natural river channel. As a requirement of the relicensing and the 401 WQC, Chelan PUD started rewatering the historic Chelan River channel in 2009. Chelan PUD also began to implement a series of measures designed to achieve biological objectives outlined in the 401 WQC. These objectives sought to improve aquatic habitat and fisheries in addition to that which the returned flows could provide.

It is accurate that spawning and rearing have been observed in tailrace waters of the Chelan hydroelectric powerhouse since November 1975, and the condition of the tailrace waters are not affected by this rulemaking. However, as a product of Chelan PUD's restoration efforts and the return of river flows, salmonids now spawn and rear in the formerly dry, historic channel of the Chelan River. Therefore, salmonid spawning, rearing, and migration are now considered existing uses. However, these uses are sub-optimal and have therefore never been fully protected, due to natural seasonally high temperatures from lake conditions. These uses must therefore be modified to note that the uses are impacted by naturally limited water conditions in Reach 4 of the Chelan River. This use designation is therefore conditioned as 'naturally limited' due to water temperatures that regularly exceed the temperature criteria known to provide full protection for salmonid spawning and rearing.

The high seasonal temperatures in the Chelan River originate from the influence that Lake Chelan has on river conditions as well as solar radiation. These temperatures preclude the designated use of **full protection** of salmonid spawning and rearing because temperatures exceeding 17.5°C have the potential to result in sub-lethal effects that may affect behavior, growth, and reproduction (EPA, 2003).

As indicated in the study by R2 and IA (2000), natural fish passage barriers exist above Reach 4 and preclude the migration of salmonids above this point. Salmonid spawning and rearing use is not existing in reaches 1-3 due to migration barriers and limited habitat. Spawning or incubation for salmonids is limited in Reaches 1-3 based on substrate type, prey availability, limited riparian vegetation, limited large woody debris, limited productivity, and high water temperatures.

In this rule, we have acknowledged that the current designated use of salmonid spawning, rearing, and migration is naturally limited by water temperatures. This designated use change more accurately defines the aquatic life uses in the previously dry Chelan River channel and does not conflict with the recognition that salmonids will continue to spawn and rear in Reach 4 of the Chelan River.

Existing uses can include those not optimally supported. If there is reason to believe that a partially supported use was once fully supported based on natural conditions, then water quality standards should not change if there are reasonable and feasible actions to restore the water body. However, in the case of the Chelan River, the Lake has surface water temperatures that regularly exceed 20°C. These warm surface waters feed the Chelan River. Therefore, seasonal warm temperatures and flow fluctuations based on lake elevation have existed historically. Reasonable

and feasible efforts to reduce water temperatures in Chelan River have been considered during the FERC relicensing settlement negotiations. During the implementation of Chelan PUD's 401 certification dam compliance schedule, water quality and habitat potential of the river were evaluated. Based on the studies and data collected, we have concluded that the salmon spawning, rearing, and migration use is an inaccurate designation for Reaches 1-3, which can only support limited downstream migration. For Reach 4, the data supports a designation of limited spawning, rearing, and migration. These uses are not fully supported for Reach 4 due to natural temperature conditions.

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

R2 and IA (R2 Resource Consultants, and Ichthyological Associates, Inc.). 2000. *Bypass reach (gorge) flow releases study report (final)*. Lake Chelan Hydroelectric Project, FERC Project No. 637. Report prepared for Public Utility District No. 1 of Chelan County, Wenatchee, Washington.

Comment E.6.2.C

The definition of the use states that salmonid spawning, rearing, and migration is identified by spawning and emergence that occurs outside of the summer season. Chelan PUD interprets this language to mean that salmonid rearing and migration must be supported throughout the year, including the summer season. The regulations, however, do not require the use to be supported year round.

Ecology Response

Chelan PUD is correct in that the salmonid spawning, rearing, and migration use must be supported year-round, unless otherwise specified by a seasonal site-specific criteria or seasonal designated uses. While the general use description is characterized by spawning and emergence outside of the summer months, the numeric criteria is set to support the uses year-round. This includes the assumption that streams in temperate climates will naturally cool in the fall and winter to provide cooler temperatures, as necessary to support the characterized use. Salmonid spawning in the Chelan River occurs from approximately October to mid-November for Chinook and March to mid-May for steelhead. This aligns with the definition of the salmonid spawning, rearing, and migration use (Mugunthan et al. 2019).

Mugunthan, P., Miller, J., and Stachura, M., 2019. Chelan River Use Attainability Analysis and Site-Specific Criteria Development. Prepared for Public Utility District No. 1 of Chelan County. Prepared by Four Peaks Environmental Science & Data Solutions. Wenatchee, WA. December.

Comment E.6.2.D

Ecology has not meaningfully evaluated whether salmonid spawning, rearing, and migration is an attainable use. EPA regulations place two limitations on states and tribes seeking to remove designated uses. First, a state or tribe must demonstrate that attaining the use is infeasible because one of six enumerated factors. Second, a state or tribe cannot remove a designated use if the use can be attained through implementation of effluent limits. Under these standards, Ecology has not justified its conclusion that salmonid spawning, rearing, and migration is not an attainable use.

Ecology Response

The Chelan River is heavily influenced by the water quality of Lake Chelan. Lake Chelan is a natural lake that would exist even if the dam were not in place. The lake is naturally warm in the summer and increases the water temperature of the Chelan River. These water quality conditions are considered natural conditions, yet because they do not meet the biologically based temperature criteria set for full protection, these conditions should not be described as fully protective of salmonid spawning, rearing, and migration. This supports Ecology's application of the UAA factor 1 (CFR 131.10(g)(1)) for all reaches of the Chelan River.

As indicated in the study by R2 and IA (2000), natural fish passage barriers exist above Reach 4 and preclude the migration of salmonids above this point. There is strong support that the salmonid spawning and rearing use is not existing in Reaches 1-3 due to migration barriers and limited habitat. This information supports Ecology's application of factor 5 for reaches 1-3 (CFR 131.10(g)(5)).

In Reach 4, the proposed designated use of salmonid spawning, rearing, and migration for naturally limited waters does not suggest that salmonid spawning, rearing, and migration is not present but rather, recognizes that it may be limited due to naturally high water temperatures. The water temperature criterion of 17.5°C is set for the salmonid spawning, rearing, and migration use based on scientific data that suggests that adverse effects may occur above this temperature (EPA, 2003). As such, there is support to change the designated use to account for natural conditions and their impact on the aquatic life in the Chelan River, as it is not feasible to attain the designated uses as they are currently assigned. Nor would full attainment of the currently assigned designated use be possible even if the Chelan dam and hydroelectric project did not exist.

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

Comment E.6.3

The proposal is contrary to the policy goals of the Clean Water Act.

The policy of the Clean Water Act does not support loosening water quality standards to relieve financial and compliance pressures on a regulated entity absent any environmental benefits. This is particularly true where the regulated entity's actions potentially created the conditions that are frustrating compliance with applicable standards. Governments should not be rewarding dischargers with relaxed requirements where the discharger has contributed to degradation in a waterbody.

Ecology Response

We do not agree that the intent of this rulemaking is to relieve financial and compliance pressure on a regulated entity. There has been a structured process in place to determine the highest attainable use in Chelan River since the settlement negotiations during the FERC relicensing efforts that includes the implementation of the 401 water quality certification and reasonable and feasible alternatives (Chelan PUD, 2003). Chelan PUD has put forth and implemented reasonable and feasible efforts to evaluate and enhance Chelan River but those efforts are limited by the water quality conditions in Lake Chelan that feed the Chelan River. The conditions of the

Chelan River are influenced by Lake Chelan, which would exist even if the dam were not there due to the known surface water temperatures that occur in the lake in the warm months of the year and feed the Chelan River. Given that the river temperature conditions are naturally influenced by the Lake, we have used the best available scientific information to determine the highest attainable use. The Clean Water Act purposely includes water quality tools to revise designated uses when it has been determined that such uses do not exist or have not existed since November 1975. The intent of this rulemaking is to more accurately assign aquatic life uses for the Chelan River and develop criteria commensurate with the conditions that support the highest attainable use.

Chelan PUD (Public Utility District No. 1 of Chelan County). 2003. Lake Chelan Hydroelectric Project Comprehensive Settlement Agreement, Final, Lake Chelan Hydroelectric Project, FERC Project No. 637.

Comment E.6.4

Ecology has not explained whether the Proposal is consistent with the 2020 Columbia River temperature TMDL.

Ecology Response

The proposed rule does not change the current thermal regime in the Chelan River from what has been existing since minimum instream flows have been established in 2009. The water temperature at the confluence of the Columbia and Chelan rivers is largely driven by water that flows through the Lake Chelan hydropower dam. This water is generally cooler in temperature, because it moves from a cooler, deep-water outlet from Lake Chelan through an underground pipe to the powerhouse of the dam. Chelan River conditions, as a tributary to the Columbia River, were included in the TMDL analysis given the existing temperature conditions that the Chelan River contributes to the Columbia River. The Lake Chelan hydropower penstock delivers water to the tailrace just upstream of the confluence of the Columbia that is no warmer (and at times cooler) than would be provided to the Columbia River if the underground penstock diversion did not exist. The proposed rule includes a requirement that the dam's tailrace waters must be cooler than the Chelan River when the water temperature in the river is greater than 17.5C.

Comment E.6.5

The proposal lacks necessary mitigation measures to facilitate future compliance and offset adverse effects. If the proposal moves forward, Yakama Nation recommends additional mitigation measures to ensure that fish survival and habitat are protected. Ecology should require an intake pipe connecting the penstock intake to cooler water than what is currently available at the current intake location. Second, Ecology should require Chelan PUD to further investigate the use of groundwater to cool Reach 4. Lastly, Ecology should require a monitoring plan to study bedload aggradation and its impact on spawning area availability. Yakama Nation acknowledges that two of the measures were previously considered and rejected. However, Chelan PUD's substantial request warrants revisiting and exploring mitigation options.

Ecology Response

As you noted, the two options considered to reduce water temperatures in the Chelan River (groundwater augmentation and an intake pipe) were reviewed by the NSWG during FERC

License settlement negotiations (Chelan PUD, 2003). As explained above, the NSWG determined that these two measures were infeasible due to limited ability to provide meaningful cool river temperatures and the excessively high cost associated with this marginal benefit. The use of groundwater to cool Reach 4 may be limited. The NSWG found that a groundwater source of 5 cubic feet per second (at 12°C) would be sufficient to reduce the temperature of the total flow by 0.7°C when the water temperature reaches 24°C (Chelan PUD, 2003). The NSWG determined that well sites in the local area are not known to produce this volume of water. The wells that supply the Chelan Hatchery, which draw from a large aquifer in the “wettest” part of the groundwater path from Lake Chelan to the Columbia River, individually produce less than 0.3 cfs. This information indicates that groundwater augmentation in Reach 4 is likely not a reasonable method to cool river temperatures. Furthermore, this UAA is based, in part, on factor 1 of the EPA UAA supporting factor conditions [CFR 131.10(g)(1)], which state that a UAA can be supported if the naturally occurring pollutant concentration prevents the attainment of the use. This factor is grounded in the basis that the optimal conditions of waterbodies is to attain the natural condition of the waters. This factor does not require augmentation of conditions, in this case cooling water further, in order to create conditions better than those which would exist naturally.

Chelan PUD has met the biological objectives for fish survival and habitat in the Chelan River as part of their 401 WQC. The Chelan River is now considered a productive salmonid bearing stream because of habitat improvement efforts and maintenance of minimum instream flows. The FERC license, the current 401 WQC, and if adopted, this rule obligate Chelan PUD to continue these efforts to protect the existing uses that have been achieved in the Chelan River, and that represent the highest attainable use.

Chelan PUD (Public Utility District No. 1 of Chelan County). 2003. Lake Chelan Hydroelectric Project Comprehensive Settlement Agreement, Final, Lake Chelan Hydroelectric Project, FERC Project No. 637.

Stillwater Sciences, 2001. *Conceptual Alternative for Chelan River Restoration, Final Report*. Prepared for Lake Chelan Caucus and Chelan County Public Utility District No. 1. June 2001.

Comment E.6.6

Ecology’s DNS for the Proposal is inadequate under SEPA. Ecology’s DNS offers no explanation as to how the agency determined that no probable adverse environmental impacts would stem from downgrading water quality standards for the Chelan River. Ecology must reissue a SEPA compliant DNS that adequately explains the environmental impacts of the proposal.

Ecology Response

Ecology provided the basis for determining that no probable adverse environmental impacts would result from this rulemaking. Ecology’s reasons for issuing a Determination of Nonsignificance (DNS) are stated in the DNS document on [Ecology’s SEPA website](#)⁶. Following SEPA guidelines, the rulemaking proposal was evaluated using the SEPA Environmental Checklist (attached to the DNS document), which is required to help determine

⁶ <https://apps.ecology.wa.gov/separ/Main/SEPA/Record.aspx?SEPANumber=202101471>

whether a proposal's impacts would likely be significant. Because this rulemaking proposal is considered a non-project action, we completed the SEPA checklist following directions for non-project proposals. In addition to the Checklist, Ecology considered other relevant information provided in the rulemaking documents. Review of the completed SEPA Checklist, as well as the additional information provided in the rulemaking documents, resulted in a Determination of Nonsignificance (DNS) for this rulemaking proposal.

The DNS was applied for this SEPA analysis because the existing river conditions will not change as a result of the proposed rulemaking. This rule will more accurately assign use designations and criteria and thus, no environmental impact is anticipated. The proposed water quality criteria assigned to the Chelan River is designed to limit thermal inputs and reflect natural conditions for temperature and dissolved oxygen as influenced by Lake Chelan. In essence, the Chelan River UAA rulemaking will change the statewide default aquatic life use that currently applies to the Chelan River, to one that is geographically specific and reflects the unique nature of this water system. Chelan PUD has made several enhancements to riverine habitat, flows, channels, and aquatic life in the Chelan River and these conditions must be maintained due to requirements in the FERC license and Ecology's 401 WQC. As part of these improvements, Chelan PUD used the adaptive management process outlined in their 401 WQC to determine the highest attainable uses of the Chelan River and found that the currently designated default use is not attainable. A change to the designated use and criteria of the Chelan River will not have negative environmental consequences, but rather, will match the highest attainable use with actual river conditions. The site-specific monitoring data that was collected and the aquatic life and habitat potential resulting from Chelan PUD's restoration activities supports the assertion that the statewide default use currently assigned to this river is not accurate. EPA states, "Setting water quality goals through assigning designated uses is best viewed as a process for states and tribes to review and revise over time rather than as a one-time exercise (EPA, 2006)." Rather than viewing this change as a downgrade in water quality standards, our perspective is that we are more accurately assigning the aquatic life use based on scientific data collected over the past decade.

United States Environmental Protection Agency. 2006. Use Attainability Analyses and Other Tools for Managing Designated Uses. EPA 821-R-07-001.

Appendix A: Citation List

Chapter 173 – 201A WAC Water Quality Standards for Surface Waters of the State of Washington AO # 20 – 01

This citation list contains references for data, factual information, studies, or reports on which the agency relied in the adoption for this rule making (RCW 34.05.370(f)).

At the end of each citation is a number in brackets identifying which of the citation categories below the sources of information belongs. (RCW 34.05.272).

Table 2 Citation Categories

Citation Categories	
1	Peer review is overseen by an independent third party.
2	Review is by staff internal to Department of Ecology.
3	Review is by persons that are external to and selected by the Department of Ecology.
4	Documented open public review process that is not limited to invited organizations or individuals.
5	Federal and state statutes.
6	Court and hearings board decisions.
7	Federal and state administrative rules and regulations.
8	Policy and regulatory documents adopted by local governments.
9	Data from primary research, monitoring activities, or other sources, but that has not been incorporated as part of documents reviewed under other processes.
10	Records of best professional judgment of Department of Ecology employees or other individuals.
11	Sources of information that do not fit into one of the other categories listed.

401 Water Quality Certification. Lake Chelan Hydroelectric Project. [401 Certification for Lake Chelan hydroelectric project \(wa.gov\)](http://www.wa.gov). [7]

BioAnalysts. 2000. *Historical occurrence of anadromous salmonids in Lake Chelan, Washington*. Prepared for Public Utility District No. 1 of Chelan County, Wenatchee, Washington. September 26, 2000. [9]

Chelan PUD (Public Utility District No. 1 of Chelan County). 2000. Bypass reach (gorge) flow releases study report. Lake Chelan Hydroelectric Project, FERC Project No. 637, Final Report. Prepared by R2 Resource Consultants, Redmond, Washington and Ichthyological Associates, Inc., Lansing, New York for Public Utility District No. 1 of Chelan County, Wenatchee, Washington. [9]

- Chelan PUD (Public Utility District No. 1 of Chelan County). 2003. Lake Chelan Hydroelectric Project Comprehensive Settlement Agreement, Final, Lake Chelan Hydroelectric Project, FERC Project No. 637. [9]
- Chelan PUD (Public Utility District No. 1 of Chelan County). 2005. Outlet structure for bypassed reach flows: water temperature profile study results for pre-design information. Lake Chelan Hydroelectric Project FERC Project No. 637. June 6, 2005. Available at: [http://www.chelanpud.org/departments/licensing Compliance/lc_implementation/ResourceDocuments/8768_1.pdf](http://www.chelanpud.org/departments/licensing%20Compliance/lc_implementation/ResourceDocuments/8768_1.pdf). [9]
- Chelan PUD (Public Utility District No. 1 of Chelan County). 2011-2019. Lake Chelan Annual Flow and Temperature Reports 2010 – 2018, License Articles 405 & 408. Lake Chelan Hydroelectric Project. FERC Project No. 637. [9]
- Chelan PUD (Public Utility District No. 1 of Chelan County). 2017. Chelan River Biological Objectives 2017 Status Report. Lake Chelan Hydroelectric Project. FERC Project No. 637. April 25, 2017. [9]
- Chelan PUD (Public Utility District No. 1 of Chelan County). 2019. Final 2019 Biological Objectives Status Report. Lake Chelan Hydroelectric Project. FERC Project No. 637. April 30, 2019. [9]
- Ecology (Washington Department of Ecology). 1997. *Water Quality in the Wapato Basin of Lake Chelan, Summer 1996*. Washington Department of Ecology Report #97-323, August. [2]
- Ecology (Washington State Department of Ecology). 2018. Water Quality Program Policy 1-11, Chapter 1, Washington’s Water Quality Assessment Listing Methodology to Meet Clean Water Act Requirements, Ecology Publication No. 18-10-25, Olympia, WA. October. Available at: <https://fortress.wa.gov/ecy/publications/SummaryPages/1810035.html> [2]
- Ecology (Washington State Department of Ecology). 2004. 401 Certification Order No. 1233, Lake Chelan Hydroelectric Project, FERC Project No. 637, Washington Department of Ecology, Yakima, Washington. June 1. [2]
- Herrera (Herrera Environmental Consultants, Inc.). 2015. *Chelan River Riparian Revegetation Feasibility Assessment (Chelan County, Washington)*. Prepared for Chelan County Public Utility District, Wenatchee, Washington. June 18, 2015. [9]
- Jacobsen R, Nott J, Brown E, Weeber M, Lewis M, Hughes E. 2013. Assessment of western Oregon adult winter steelhead – 90ed surveys 2013. Monitoring Program Report Number OPSW-ODFW-2013-09. Oregon Department of Fish and Wildlife, Salem, Oregon. [9]
- Kendra W, Singleton L. 1987. *Morphometry of Lake Chelan*. Water Quality Investigations Section, Washington Department of Ecology Report No. 87-1, Olympia, Washington. January. [2]
- Mugunthan P, Miller J, Stachura M. 2019. Prepared for Public Utility District No. 1 of Chelan County. Prepared by Four Peaks Environmental Science & Data Solutions. Wenatchee, WA. December. [9]

- PCHB No. 03-075, Pollution Control Hearings Board. 2004. *Confederated Tribes of the Umatilla Indian Reservation and The Columbia River Inter-Tribal Fish Commission v. Department of Ecology, Public Utility District No. 1 of Chelan County*. [6]
- R2 and IA (R2 Resource Consultants, and Ichthyological Associates, Inc.). 2000. *Bypass reach (gorge) flow releases study report (final)*. Lake Chelan Hydroelectric Project, FERC Project No. 637. Report prepared for Public Utility District No. 1 of Chelan County, Wenatchee, Washington. [9]
- Snow C, Frady C, Grundy D, Goodman B, Haukenes A. 2018. Monitoring and evaluation of the Wells Hatchery and Methow Hatchery programs: 2017 annual reports. Report to Douglas PUD, Grant PUD, Chelan PUD, and the Wells and Rocky Reach HCP Hatchery Committees, and the Priest Rapids Hatchery Subcommittees, East Wenatchee, Washington. [9]
- Stillwater Sciences, 2001. *Conceptual Alternative for Chelan River Restoration, Final Report*. Prepared for Lake Chelan Caucus and Chelan County Public Utility District No. 1. June 2001. [9]
- U.S. Environmental Protection Agency. 2003. EPA Region 10 Guidance for Pacific Northwest State and Tribal Temperature Water Quality Standards. EPA 910-B-03-002. Region 10 Office of Water, Seattle, WA. [9]
- United States Environmental Protection Agency. 2006. Use Attainability Analyses and Other Tools for Managing Designated Uses. EPA 821-R-07-001. [9]
- Van der Broek K, Pfleeger A, Pandit S, Bollman W. 2018. *Macroinvertebrate investigation, Chelan River (final report)*. Prepared by Terraqua, Inc. for Public Utility District #1 of Chelan County. [9]
- WEST Consultants. 2016. *Chelan River temperature model calibration and initial results, final*. Prepared by WEST Consultants, Inc, for the Public Utility District No. 1 of Chelan County, Washington. June 1, 2016. [9]
- 40 CRF 131.10 [7]
- 40 CFR 131.11 [7]
- WAC 173-201A-440 [7]
- WAC 173-201A-430 [7]

Appendix B: Public Comments



COLUMBIA RIVER INTER-TRIBAL FISH COMMISSION

700 NE Multnomah Street, Suite 1200
Portland, Oregon 97232

(503) 238-0667
F (503) 235-4228
www.critfc.org

May 21, 2021

Delivered via web portal and e-mail

Marla Koberstein
Water Quality Program
Washington State Department of Ecology
PO BOX 47600
Olympia, WA 98504-7600
mkob461@ecy.wa.gov

RE: Proposed Revisions to Water Quality Standards for Surface Waters of the State of Washington: Use Attainability Analysis and Site-Specific Criteria for Chelan River

Dear Ms. Koberstein:

The Columbia River Inter-Tribal Fish Commission (CRITFC) appreciates the Washington State Department of Ecology (Ecology) reaching out to our staff to discuss the proposed changes to water quality standards for the Chelan River. CRITFC is invested in restoring and improving habitat for Columbia Basin fisheries. Chelan PUD's proposal to change designated uses of the Chelan River through a "use attainability analysis" (UAA) and then set site-specific water quality criteria that will diminish protections for the waterbody, is an action that should be taken with great care and thorough analysis. CRITFC finds the overall analyses inadequate; CRITFC does not agree that the new use designation is for the "highest attainable use" or that Chelan PUD has implemented all known, reasonable, and feasible measures to meet criteria. CRITFC therefore requests that Ecology reevaluate the proposals.

CRITFC's member tribes, the Yakama Nation, the Confederated Tribes of the Umatilla Indian Reservation, the Nez Perce Tribe, and the Confederated Tribes of the Warm Springs Reservation of Oregon, have accessed the fisheries of the Columbia Basin since time immemorial. These rights were secured in each of their respective treaties with the U.S. government and as such, the tribal treaty fisheries have priority first in time and place to any hydropower dam in the basin. Dams are not and should not be considered part of any "baseline" when assessing the condition of a waterbody or attainability of its uses. Instead, dams must be held accountable for their contribution to water quality impacts such as heat trapping, dissolved oxygen reduction, and other conditions that reduce habitat viability for aquatic life.

The State of Washington has promised to take bold action to address climate change, yet actions such as this do not align well with those goals. For the Columbia Basin's salmonids to survive, the region needs to do the hard work to reduce water temperatures of tributaries as well as the mainstem river and find and maintain healthy habitat to support fisheries into the future.

The Proposal Sets a Precedent That Conflicts with the Purpose of the Clean Water Act.

This proposal allows for removal of a designated use, a diminishment of another designated use, and downgrade of water quality criteria in an already water quality-compromised watershed, merely for the benefit of Chelan PUD. In fact, Ecology, in its cost-benefit analysis document, points out that the proposal will result in “benefits of avoided noncompliance for Chelan PUD” See Publication 21-10-005. Yet, Ecology does not factor the cost to fisheries, water quality, or the environment. The precedent of allowing a regulated discharger to change uses and downgrade its obligations, even though it has a direct impact on those conditions, is troubling. It is also contrary to the purpose and intent of the Clean Water Act (CWA) to “restore and maintain the biological integrity of the Nation’s waters” or Washington State’s goal to “retain and secure high quality for all waters of the state.” § 90.48 RCW.

Ecology Cannot Remove a Use that is Existing.

A UAA allows states to remove a “designated use” (or set sub-categories of a use) if that use is not feasibly attainable. 40 CFR § 131.10(g). Designated uses are different from “existing uses” which cannot be removed. 40 CFR § 131.3. Furthermore, the CWA and Washington State’s antidegradation rule requires the state to maintain and protect existing uses. WAC § 173-201A-310(1). As such, Ecology must set appropriate water quality criteria to protect the most sensitive existing uses of the Chelan River.

It is unclear that Ecology has adequately researched whether salmonid spawning in the Chelan River is an existing use. An existing use is one that was “actually attained in the water body on or after November 28, 1975.” 40 CFR § 131.1(e). Based on the available documents, CRITFC cannot find evidence to support Ecology’s assertion that salmonid spawning was not an existing use. On the other hand, there is evidence that salmonid spawning occurred in the 1980s and 1990s.¹

Ecology’s Proposed Site-Specific Criteria is Inadequate to Support Existing Uses.

According to our assessments, the site-specific criterion downgrade is not warranted, and, in fact, the new criteria will not adequately support the current existing uses. Furthermore, Chelan PUD has not implemented all reasonable and feasible measures to improve the temperatures of Reach 4 of the Chelan River.

In Chelan PUD’s Chelan River UAA² And Site-Specific Criteria Development, Chelan PUD proposes a revision of the default aquatic life use (salmonid spawning, rearing, and migration in the Chelan River) to the highest attainable use and site-specific temperature and dissolved oxygen (DO) in the river. Water quality conditions in the river are heavily influenced by the

¹ U.S. Fish and Wildlife Service, *Statute and Propagation of Chinook Salmon in the Mid-Columbia Through 1985*, at 68 (1987), Chelan PUD, Final 2019 Biological Objectives Status Report, 31.

² Four Peaks Environmental, Chelan River Use Attainability Analysis And Site-Specific Criteria Development, 2019.

water quality conditions in the lake, which is the river's source of water. In-lake and river water temperatures routinely exceed the temperature criteria of 17.5°C for salmonid spawning, rearing, and migration. In fact, in all years of the Chelan River Biological Evaluation and Implementation Plan³ (CRBEIP), summer temperatures exceeded 20°C at the dam's lower-level outlet (LLO), which draws source river water from the lower forebay of Lake Chelan's Wapato Basin.

The site-specific water quality criteria for temperature being proposed by Chelan PUD was developed based on two factors. First, that high in-river temperatures are causally related to high in-lake water temperatures and second, solar heating also exhibits some control on the in-river temperatures. The proposed criteria are the product of a statistical boot-strapping analysis that involved 7-day average of the daily maximum (7-DADMax) temperature over a 10-year period of record. The details of the proposed standard are explained in Appendix A of the UAA. Visually, the proposed criteria look like current in-river temperature conditions (Fig. 1⁴).

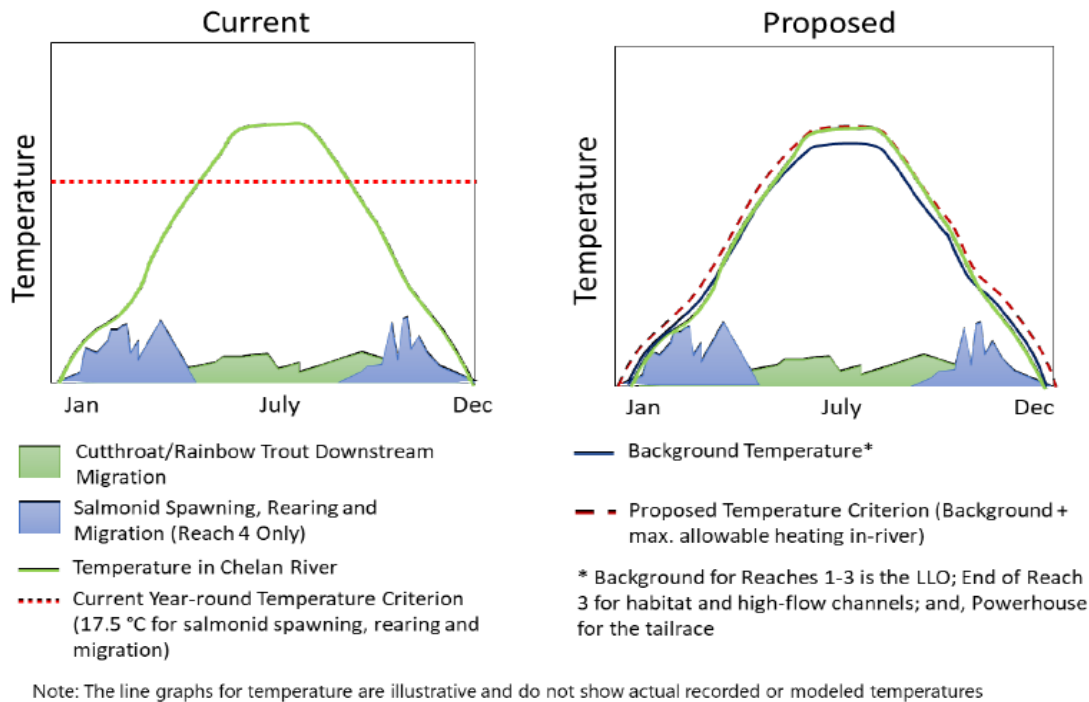


Figure 1. Conceptual Illustration of Proposed Site-Specific Temperature Criteria for the Chelan River, from the UAA.

To evaluate additional management options, a QUAL-2K model of the river was developed. Among other things, the model was used to investigate temperature effects at different discharges from the LLO⁵. Increasing flow was shown to reduce daily maximum temperature by up to 1°C for an increase from 80 cfs to 200 cfs, while increasing flow to 500 cfs could reduce daily maximum water temperature by 2°C. The model simulations also resulted in higher minimum nighttime temperatures. However, the model produced constant flow simulations,

³ Chelan PUD, Chelan River Biological Evaluation And Implementation Plan, 2003.

⁴ Four Peaks Environmental, Chelan River Use Attainability Analysis And Site-Specific Criteria Development, 82.

⁵ WEST consultants, Chelan River Temperature Model Calibration and Initial Results, 2016

which may not have best represented snowmelt-influenced run-off patterns, where stream flows decrease at night.

We do not know exactly what the historic pre-dam flow regime was, and it was not modeled in the UAA. However, we can make inferences from the period of record (1903-present) inflows and outflows to the lake (Fig. 2). From that, we can see that the higher discharges simulated in the QUAL-2K model (e.g., 500 cfs) are not unlike discharges that would be seen in a naturally flowing Chelan River. In fact, an analysis of flow exceedance shows a 90% probability of exceeding 500 cfs over the period of record (Fig. 3).

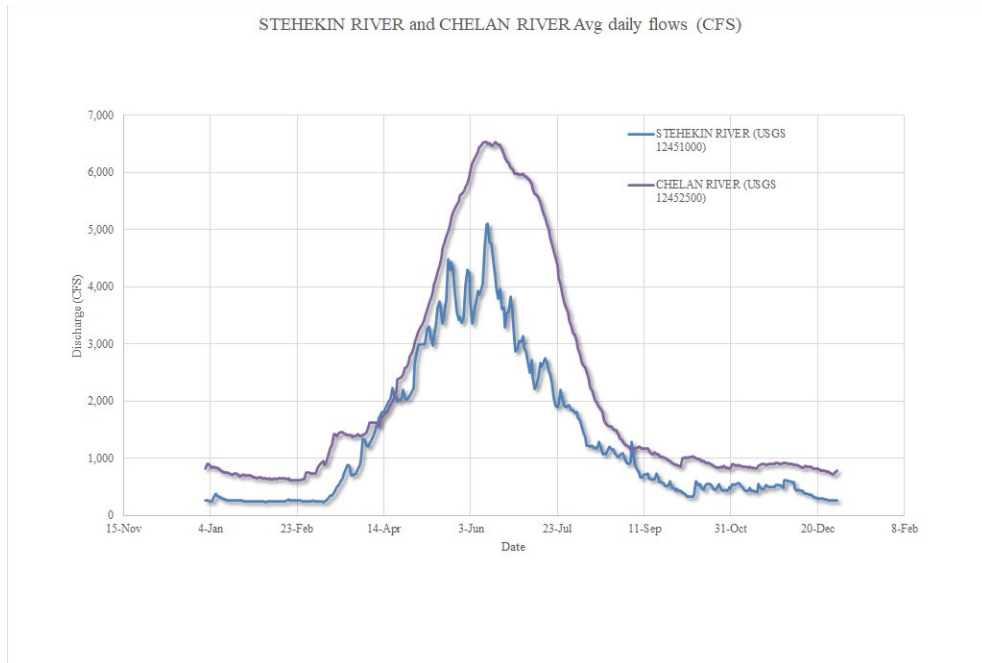


Figure 2. Average daily stream flows at the inflow to Lake Chelan (Stehekin River - USGS 12451000) and the outflow to Lake Chelan (Chelan River - USGS 12452500) from 1903 – 2021.

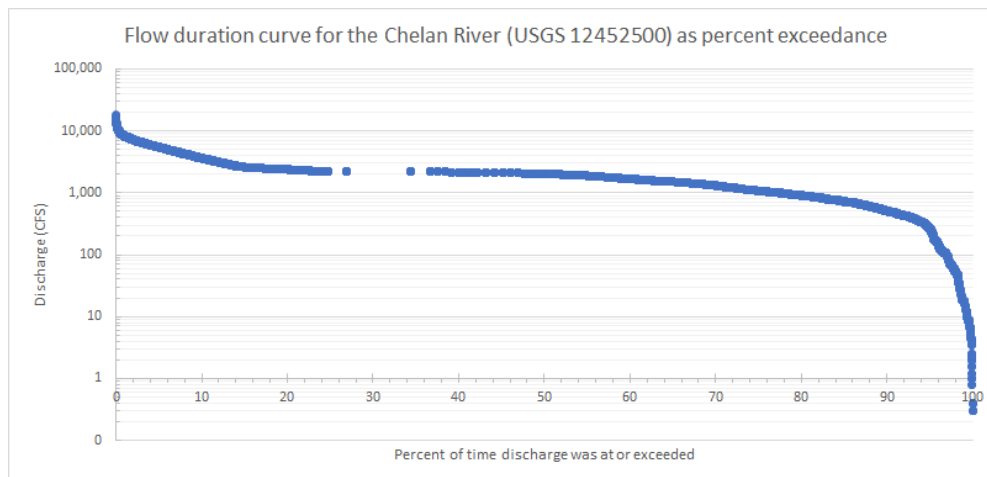


Figure 3. Probability exceedance curve for the Chelan River over the period of record, 1903-2021.

Thus, what we see in the UAA is a request for a site-specific criterion for temperature that closely follows the current operating conditions and not the natural flow regime of the river, pre- or post-development. When lake discharges are used as surrogate for natural Chelan River flows (e.g., non diverted powerhouse flows), it seems reasonable, then, to expect temperature benefits like those observed in the QUAL-2K modeled simulations. Thus, in the absence of more robust pre-development modeling, it is unreasonable to accept a site-specific criterion for temperature that resembles current operating conditions without considering natural free-flowing conditions.

The bar for issuance of the first-ever site-specific temperature criteria in the state of Washington should be onerously high. Again, this UAA proposes a site-specific criterion for temperature that closely resembles the current operating conditions without an exhaustive analysis of pre-development or natural flow conditions. Ecology should seriously consider the effect of setting a precedent where the applicant can set water quality criteria according to current conditions, not natural conditions. We do not feel that this analysis meets the high bar necessary for setting a rule-making precedent of that kind.

The Proposed Criteria Conflicts with Ecology's Position on the Columbia River TMDL.

The proposed site-specific criteria allowance for temperature in the Chelan River is contrary to the position that Ecology takes in its August 2020 letter to EPA on the TMDL for temperature in the Columbia and lower Snake rivers. In its comments to EPA, Ecology states:

We must address the temperature issues on the Columbia and Snake River in order to provide cool, clean waters for salmon... We do not agree with EPA's recommendation to weaken our water quality standards... We should focus on implementing actions that can reduce temperatures and help us meet our water quality standards.

EPA's TMDL assigns a cumulative temperature load allocation to the 23 major tributaries that drain into the Columbia and lower Snake rivers. One of these 23 tributaries is the Chelan River. Ecology should adhere to the goals outlined in its August 2020 comments to EPA and find additional measures that can be taken to minimize the thermal load that the Chelan River delivers to the mainstem Columbia.

Ecology Should Consider the Yakama Nation Proposed Mitigation Options.

In addition to using higher flow options, Yakama Nation has proposed two possible mitigation actions which need to be more fully explored. The first is building a pipeline connecting the penstock intake to water cooler than is available at the current intake location. The second is the use of groundwater to cool Reach 4. The pipeline option is summarily dismissed by Chelan PUD because of a limited ability to provide cooler water and cost. The groundwater option was eliminated because of a low probability that enough groundwater would be available. It is premature to take these alternatives off the table. Because the requests of UAA are extraordinary we feel these mitigation options should be more fully explored and the costs and benefits of these options shared.

CRITFC supports and incorporates by reference the entirety of the Yakama Nation comments. Thank you for your time and consideration. If you have any questions, please contact our staff, Dianne Barton, Tom Skiles, or Julie Carter at (503) 238-0667.

Sincerely,

A handwritten signature in black ink, appearing to read "Aja K. DeCoteau". The signature is fluid and cursive, with a large initial "A" and "D".

Aja K. DeCoteau
Interim Executive Director

Cc: Melissa Gildersleeve mgil461@ecy.wa.gov



Confederated Tribes of the Colville Reservation

Natural Resources Department - Office of Environmental Trust
P.O. Box 150 Nespelem, WA 99155 Phone: 509-634-2411 Fax: 509-634-2422

21 May 2021

Attn: Marla Koberstein
Water Quality Standards Project Manager
Washington State Department of Ecology
Water Quality Program

RE: CTCR ETD & F&W Comments – Water Quality Standards for Surface Waters of the State of Washington Rulemaking

Pursuant to the notice dated March 25, 2021, the Confederated Tribes of the Colville Reservation (“Colville Tribes” or “CTCR”) Environmental Trust Department (ETD) and Fish and Wildlife Department (F&W) submit these initial comments concerning Chelan Public Utility Department submitting a proposal for a Use Attainability Analysis (UAA) for the aquatic life designated use on the Chelan River.

Chelan River is in the Traditional Territories of CTCR, specifically the Chelan Tribe. The Colville Tribes have been the caretakers of our lands and waters since time immemorial, and now share the responsibility of management and stewardship with multiple jurisdictions, including Ecology.

Water resources are critical to the Colville Tribes’ way of life. Water is an essential resource for the Tribes’ culture, traditions, and subsistence, indispensable for the fish, wildlife, and other foods and medicines upon which the Tribes and its members rely daily. Water scarcity, land development, and climate change will continue to have a significant impact upon our shared water resources for generations to come.

In light of these overarching and critical concerns, CTCR ETD provides the following comments regarding the rulemaking process to updated the water quality standards for the Chelan River, specifically related to:

Changing temperature and dissolved oxygen criteria, to align with the highest achievable water quality.

Site-specific water quality criteria development is centered on temperature because it is the primary water quality parameter that does not meet the existing temperature criteria and also poses a limitation on aquatic habitat suitability. Other parameters, such as Dissolved Oxygen (DO) can be affected by temperature, but in general, the observed data have shown that there are no critical water quality issues that preclude the existing default designated aquatic life use in the River [Chelan] besides temperature. The proposed water quality criteria, however, included an alternative site-specific DO saturation criterion to the extent that temperature and atmospheric pressure preclude achievement of the DO concentration criterion.

The overall approach for developing the site-specific temperature criteria centers on maintaining the existing conditions that support the highest attainable aquatic life use in

the River [Chelan]. The warmest temperature conditions occur from mid-May through mid-October when the lower portions of the Lake (Wapato Basin and the forebay) reach temperatures that are harmful to salmonids. Because the high temperature originates in the Lake [Chelan] and the extent of solar heating controls further increases within the River [Chelan], the site-specific criterion is developed on the basis of these two factors. Finally, the proposed criterion also considers the warming within the River [Chelan] in response to long-term air temperature changes projected for the region as a result of climate change.¹

It's important to acknowledge that anthropogenic development on Lake Chelan and the surrounding lake edge shoreline have negatively affected water quality. Development in the shoreline has reduced or extinguished lake shoreline habit features. The negative impacts have contributed to increased water temperatures. Continued, un-mitigated lake/shoreline development will decrease lake and river water quality. ETD agrees that, "No anthropogenic heat source inputs are allowed downstream of the Lake Chelan Dam outlet to the Chelan River confluence with the Columbia River". Additionally, consideration is needed for all future development on Lake Chelan (e.g., boat docks), and on the lake shoreline.

Apparently this UAA is the first for Ecology. There is concern that if this proposal is approved, then a precedent will be set to further downgrade water quality standards.

CTCR water quality standards maintain a primary interest in the protection, control, conservation, and utilization of the water resources important to the Chelan Tribe, CTCR, and the collective regional tribal relatives.

Bret Nine, Resident Fish Manager from CTCR F&W provides the following comments related to:

Changing the aquatic life designated use in the Chelan River from "salmon spawning, rearing, and migration," which currently applies to all sections of the river, to "migration for naturally limited waters" in the upper reaches of the river, and to "salmonid spawning, rearing, and migration for naturally limited waters" to the lower part of the river.

The Chelan River is a unique river with year round flows provided via a dam at the outlet of Chelan Lake. Previous to any dam, the river would have had annual flows in the spring, becoming dry by late summer and fall. Currently, the river is fed by the warmer surface waters from Lake Chelan and although flows are provided year round, elevated water temperatures in the summer are above salmonid tolerance levels which would limit salmonid survival and production in the river.

The river is divided in to 4 reaches; reach 1 at the dam and reach 4 flowing into Columbia River. Reaches 1-3 provide flows and limited habitat for entrained fish, mainly Cutthroat trout, but any production would be limited due to elevated water temperatures in the summer. Reach 3 has a series of obstacles that limit fish passage upstream which would be a barrier to steelhead and salmon migration, spawning and incubation from occurring in the first three reaches. Chelan PUD has constructed a spawning channel in reach 4 that supports both steelhead and chinook spawning and incubation.

Due to elevated water temperatures and migration barriers and the addition of the spawning channel in reach 4, I would support the proposed change in the aquatic life designated use in the Chelan River. Specifically, reaches 1-3 would change from "salmonid spawning, rearing, and

¹ Chelan River Use Attainability Analysis and Site-Specific Criteria Development. Four Peaks Environmental Science & Data Solutions. December 2019

migration,” to “migration for naturally limited waters,” and to “salmonid spawning, rearing, and migration for naturally limited waters” in the lower river where steelhead and salmon spawning habitat is available. By definition the main change acknowledges limitations with the physical, biological and chemical aspects of the river which is not fixable in my opinion due to the extenuating circumstance with this water system (i.e. without the dam no water would be present in the summer and fall).

CTCR ETD & F&W appreciate the opportunity to comment on this proposal.

Respectfully,

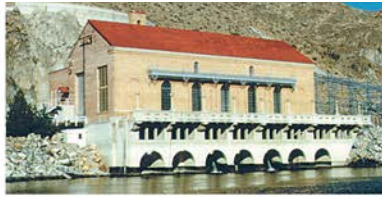
A handwritten signature in black ink, appearing to read 'D. Marconi', with a long horizontal flourish extending to the right.

Douglas R. Marconi Jr.
Watershed Program Manager
Environmental Trust Department

Kim Fischer

I'm trying to make sense of the wording on this proposal. It's vague at best, but what I gather is that the protection of the mid to upper River areas is deemed to be "hard" ... so the easy thing to do is change the designation to something less stringent.

If so, I don't support that at all. Salmon (and also orca who need the salmon) need all the help they can get to survive the never ending onslaught of human interference. We must begin doing hard things and right our environmental wrongs before it's too late. So I disagree with renaming and/ or redesignating - instead please protect the habitat - do the hard but right things.



PUBLIC UTILITY DISTRICT NO. 1 of CHELAN COUNTY

P.O. Box 1231, Wenatchee, WA 98807-1231 • 327 N. Wenatchee Ave., Wenatchee, WA 98801

(509) 663-8121 • Toll free 1-888-663-8121 • www.chelanpud.org

May 21, 2021

Comments Filed Online

Ms. Marla Koberstein
Washington State Department of Ecology
Water Quality Program
300 Desmond Drive SE
Lacey, WA 98503

Re: Letter of Support and Comments on Proposed Rule Making (CR-102) for Changing the Designated Use and Water Quality Criteria for the Chelan River in WAC 173-201A-602

Dear Ms. Koberstein:

The Public Utility District No. 1 of Chelan County (Chelan PUD) respectfully submits this comment letter on the above-referenced proposed rulemaking for the Chelan River. Chelan PUD appreciates Washington State Department of Ecology's (Ecology) responsiveness to the request for modifying the aquatic life designated use and the associated temperature and dissolved oxygen (DO) criteria for the Chelan River based on the Use Attainability Analysis¹ (UAA) submitted to Ecology in December 2019.

Chelan PUD has reviewed the rule proposal documents that were provided with the CR-102 announcement². Chelan PUD is supportive of the rule change proposal and largely concurs with the documents provided in support of the proposal. During the review of the proposed rule language and supporting documents we identified a few areas that were ambiguous for which we request clarifications. These are discussed below.

1. Clarification on the use designation and criteria that apply to the tailrace and the high-flow sections of Reach 4 in Table 602.

From the latitudes and longitudes provided in the last row of the proposed changes to Table 602³, the geographical extent between the two points (i.e., between 47.8117, -119.9848 and

¹ Mugunthan, P., Miller, J., and Stachura, M., 2019. Chelan River Use Attainability Analysis and Site-Specific Criteria Development. Prepared for Public Utility District No. 1 of Chelan County. Prepared by Four Peaks Environmental Science & Data Solutions. Wenatchee, WA. December. Available at: <https://fortress.wa.gov/ecy/ezshare/wq/standards/ChelanUAA.pdf>

² Available at: <https://ecology.wa.gov/Regulations-Permits/Laws-rules-rulemaking/Rulemaking/WAC173-201A-Chelan-UAA>

³ Ecology, 2021a. Water Quality Standards for Surface Waters of the State of Washington Chapter 173-201A-WAC: Overview of Proposed Changes to Current Rule, Publication 21-10-009, Water Quality Program, Washington Department of Ecology, Olympia, WA. March. Available at: <https://apps.ecology.wa.gov/publications/documents/2110009.pdf>

47.8044, -119.9842) encompasses the habitat channel, the high-flow channel and the tailrace. The geographical extent defined by these coordinates is consistent with how Reach 4 is defined in Chelan PUD's UAA. However, neither the proposed rule change language nor the supporting documents provided with the CR-102 announcement explicitly define Reach 4 to include all three sections. We request clarification from Ecology that the proposed change to the aquatic life uses in the last row of Table 602 and the corresponding temperature and DO criteria in footnote 3, apply to the habitat channel, high-flow channel and the powerhouse tailrace.

2. Interpretation of anthropogenic sources in the proposed changes to Table 602.

Footnote 4 of the proposed changes to Table 602 would provide that “*No anthropogenic heat source inputs are allowed downstream of the Lake Chelan Dam outlet to the Chelan River confluence with the Columbia River*”⁴. As stated in the Technical Support Document and other supporting documents, the purpose of this provision is to ensure that “*the highest attainable use is not degraded by future anthropogenic heat sources*”⁵. Chelan PUD is concerned, however, that the existing powerhouse flows to the tailrace and the supplemental pump back flows from the tailrace to the habitat channel to support spawning might be considered anthropogenic sources prohibited by footnote 4, even though these existing flows are authorized or required under the existing FERC license and Clean Water Act Section 401 Certification. We request clarification that the reference to “*anthropogenic heat source inputs*” in Footnote 4 does not include these existing sources.

3. DO Saturation Criteria for Reach 4 Habitat Channel.

Footnotes 1 and 3 in the proposed changes to Table 602 include DO criteria of 8 mg/L or 90 percent saturation for Reaches 1 to 3 and 8 mg/L or 95 percent saturation for Reach 4, respectively. Page 51 of the UAA Technical Support Document discusses why oxygen saturation is appropriate at high temperature, but neither this document nor the footnotes in proposed changes to Table 602 indicate whether such saturation criteria apply even when the DO is greater than 8 mg/L. It is possible that when temperature is low or barometric pressure is high the 90 or 95 percent saturation levels for DO may be higher than 8 mg/L. We request clarification that the saturation criteria proposed in Table 602 apply only when DO is lower than 8 mg/L.

4. Chelan River Flow Rate.

Chapter 4 (Page 26) of the Preliminary Regulatory Analyses⁶ document indicates that “*During the federal relicensing, Chelan PUD addressed the potential impacts of various methods to*

⁴ Ecology, 2021a. Water Quality Standards for Surface Waters of the State of Washington Chapter 173-201A-WAC: Overview of Proposed Changes to Current Rule, Publication 21-10-009, Water Quality Program, Washington Department of Ecology, Olympia, WA. March. Available at: <https://apps.ecology.wa.gov/publications/documents/2110009.pdf>

⁵ Ecology, 2021b. Draft Chelan River Use Attainability Analysis and Site Specific Criteria: Technical Support Document, Publication 21-10-008, Water Quality Program, Washington State Department of Ecology, Olympia, WA. March. Available at: <https://apps.ecology.wa.gov/publications/documents/2110008.pdf>

⁶ Ecology, 2021c. Preliminary Regulatory Analyses, Publication 21-10-005, Water Quality Program, Washington State Department of Ecology, Olympia, WA. March. Available at: <https://apps.ecology.wa.gov/publications/documents/2110005.pdf>

Ms. Marla Koberstein, Water Quality Program
Washington State Department of Ecology
Page 3
May 21, 2021

increase river flows and indicated they would be too costly relative to potential beneficial impact...". As listed in the first bullet that follows this statement in the document, cost was not the primary reason the higher flows were eliminated. Rather, the higher flows were shown to hinder the attainment of the biological objectives because of the reduction in useable biological habitat. The current flows were determined to be optimal during the 10-year adaptive management studies that were overseen by the Chelan River Fishery Forum, which included representatives from Ecology, Washington State Department of Fish and Wildlife, federal fish agencies, Tribes, and other stakeholders. We request that Ecology include a clarification so that the statement cited above is not misconstrued as cost being the driver for eliminating higher flows.

Chelan PUD appreciates the opportunity to submit comments and believes the clarifications requested above would reduce ambiguity and avoid misinterpretations of the proposed rule change and facts presented in the supporting documents. Our team looks forward to working with Ecology through the next phases of the rule making and subsequent implementation.

Please contact me if there are any questions on these requests for clarifications at (509) 661-4186 or by email at marcie.clement@chelanpud.org.

Sincerely,



D. Marcie Clement
Water Resources Program Manager
Public Utility District No. 1 of Chelan County

cc: Damon Roberts, Mark Peterschmidt and Breean Zimmerman, Washington State Department of Ecology, Central Region – ***Sent via Email***
Melissa Gildersleeve, Chad Brown, Bryson Finch, Washington State Department of Ecology, Headquarters - ***Sent via Email***

FN/58247



**UNITED STATES ENVIRONMENTAL PROTECTION
AGENCY
REGION 10**

1200 Sixth Avenue, Suite 155
Seattle, WA 98101

WATER
DIVISION

Marla Koberstein
Washington State Department of Ecology
Water Quality Program
P.O. Box 47600
Olympia, WA 98504-7600

RE: EPA's Comments on the Proposed Chelan Use Attainability Analysis

Dear Ms. Koberstein:

Thank you for the opportunity to provide comments on the Washington State Department of Ecology's proposed amendments to chapter 173-201A WAC – Water Quality Standards for Surface Waters of the State of Washington, filed on March 24, 2021. Specifically, Ecology is proposing revisions to the following chapters:

- Changing WAC 173-201A-020 (Definitions)
- Changing WAC 173-201A-440 (Use Attainability Analysis)
- Changing the designated use for the Chelan River in WAC 173-201A-602 (Table 602— Use designations for fresh waters by water resource inventory area (WRIA)) and adding requirements for temperature and dissolved oxygen levels that will only apply to the Chelan River

EPA has reviewed Ecology's proposed rule revisions and additions and offers the following comments for your consideration:

I. Comments on the proposed Rule Language:

The proposed language at WAC 173-201A-602, Table 602: WRIA 47 – Chelan, Note 4, "*No anthropogenic heat source inputs are allowed downstream of the Lake Chelan Dam outlet to the Chelan River confluence with the Columbia River.*"

EPA recommends providing additional clarity regarding the meaning of the statement, "no anthropogenic heat source inputs" as the language is vague. Suggest more specific language, for example "no heat inputs controlled by the state," to specify what is being controlled by this statement.

II. Comments on the Draft Chelan River Use Attainability Analysis and Site Specific Criteria: Technical Support Document (TSD):

1. Discussions regarding site specific criteria in the TSD refer to the criteria that protect the revised designated use, or the highest attainable use (HAU). This distinction is discussed in the proposed rule preamble at 78 FR 54524,¹ and excerpted below:

¹ <https://www.govinfo.gov/content/pkg/FR-2013-09-04/html/2013-21140.htm>

The concept of HAU should not be confused with “site-specific criteria.” A site-specific criterion is designed to protect the current unchanged designated use, but the criterion value may be different from the statewide or otherwise applicable criterion because it is tailored to account for site-specific conditions that may cause a given chemical concentration to have a different effect on one site than on another. By contrast, the criterion supporting a newly established highest attainable use is designed to protect the revised use associated with a different aquatic community expected in the water body.

EPA recommends revising the TSD to clarify that the proposed criteria is the HAU instead of site specific criteria.

2. Because the factor used to determine the need for a use change is at 40 CFR 131.10(g)(1), *Naturally occurring pollutant concentrations prevent the attainment of the use*, the HAU for the waterbody should only include the naturally warmer temperatures and not additional temperature increases associated with anthropogenic sources, such as climate change effects. EPA recommends modifying the HAU to only include the natural effects on the river.
3. Figure citations are off in the TSD starting with Figure 5. Please revise to ensure accuracy.
4. Table 2, Water quality criteria for the Chelan River (WAC 173-201A-200), states the duration for temperature as “*7-day average of the daily minimum.*” Please revise to say, “*7-day average of the daily maximum.*”
5. Table 4, Current and proposed aquatic life uses for the Chelan River. Column heading “Proposed Existing Aquatic Life Use2,” should be changed to say, “Proposed Aquatic Life Use2” as the draft language could cause confusion over what is “attainable” vs what is an “existing” use.

EPA appreciates Ecology’s commitment to update Washington’s water quality standards. We look forward to continuing to engage with you throughout this process. If you have any questions, please contact me at (206) 553-0268 or Guzzo.Lindsay@epa.gov.

Sincerely,

LINDSAY GUZZO Digitally signed by LINDSAY
GUZZO
Date: 2021.05.21 12:26:15 -0700

Lindsay Guzzo
Water Quality Standards Coordinator



Confederated Tribes and Bands
of the Yakama Nation

Established by the
Treaty of June 9, 1855

May 21, 2021

Sent via Electronic Filing

Laura Watson
Director
Department of Ecology
300 Desmond Drive SE
Lacey, WA 98503

Re: AMENDMENTS TO CHAPTER 173-201A AND CHANGES TO DESIGNATED USES IN THE
CHELAN RIVER

Dear Director Watson:

I write on behalf of the Confederated Tribes and Bands of the Yakama Nation (“Yakama Nation”) in response to the Department of Ecology’s (“Ecology”) invitation for comments on its proposal to amend Chapter 173-185 WAC, Water Quality Standards for Surface Waters of the State of Washington, and to change the designated use for the Chelan River (“Proposal”).¹ The Yakama Nation opposes the Proposal in whole and urges Ecology to retain salmonid spawning, rearing, and migration as the designated use for Chelan River.

The Yakama Nation is a sovereign and original Native Nation federally-recognized under the Treaty with the Yakamas, U.S. – Yakama Nation, June 9, 1855 (“Treaty of 1855”).² In Article III of the Treaty of 1855, the Yakama Nation expressly reserved the right to take fish at “usual and accustomed places” outside of the Yakama Reservation.³ The Yakama treaty negotiators knew that securing this right was crucial to guaranteeing the vitality of their people. For the Yakama Nation, the exercise of fishing rights was “not much less necessary...than the atmosphere they breathed.”⁴

The Yakama Nation acts as a steward over the water resources of this region in exchange for the livelihood that they provide, “speaking for the things that cannot speak for themselves.” The Yakama Nation’s Fisheries Resource Management Program and Yakima/Klickitat Fisheries Project have seen considerable success revitalizing fish

¹ The Yakama Nation incorporates by reference the comments filed by the Columbia River Inter-Tribal Fish Commission.

² 12 Stat. 951 (June 9, 1855, ratified March 8, 1859, proclaimed April 18, 1859).

³ *Id.* at 953.

⁴ *U.S. v. Winans*, 198 U.S. 371, 381 (1905).

populations and habitat throughout the Columbia River Basin. Increases in water temperature and pollutant levels caused by climate change and other anthropogenic sources threaten that success. The Yakama Nation therefore has a significant interest in ensuring that water quality regulation in Washington is both consistent with applicable law and adequately protective of aquatic life and habitat.

These comments will focus on specific flaws with the Proposal:

1. Ecology has inappropriately deferred to Public Utility District No. 1 of Chelan County's ("Chelan PUD") interests, analyses, and conclusions;
2. the Proposal is not warranted or proper under Chelan PUD's Section 401 certification and other Clean Water Act requirements;
3. the Proposal is contrary to the policy goals of the Clean Water Act;
4. Ecology has not explained whether the Proposal is consistent with the Total Maximum Daily Load for Temperature in the Columbia and Lower Snake River ("2020 TMDL");
5. the Proposal lacks necessary mitigation measures to facilitate future compliance and offset adverse impacts;
6. Ecology's Determination of Non-Significance ("DNS") for the Proposal is inadequate under the State Environmental Policy Act ("SEPA").

The Yakama Nation considers these aspects of the Proposal to be the most problematic and therefore devotes its comments to them. The fact that the Yakama Nation does not state its opposition to a particular element of the Proposal should not be interpreted as approval of that element; as noted above, the Yakama Nation recommends that Ecology forego the Proposal entirely. Finally, the Yakama Nation reserves the right to provide further input beyond the public comment period and to request government-to-government consultation on the Proposed Rule as Tribal Council deems necessary.

1. Ecology has inappropriately deferred to Chelan PUD's interests, analyses, and conclusions.

Environmental Protection Agency ("EPA") regulations at 40 C.F.R. Part 131, Subpart B prescribe rules for establishing water quality standards.⁵ Section 131.10, which deals with use designations, includes directives specific to use attainability analyses. The references to use attainability analyses in this section consistently provide that the state (or tribe) is the entity that conducts the analysis.⁶ The regulations do not contemplate use attainability analyses by regulated entities or any other non-state actors.

⁵ 40 C.F.R. § 131.10-131.15.

⁶ See 40 C.F.R. § 131.10(a); 40 C.F.R. § 131.10(g); 40 C.F.R. § 131.10(j); 40 C.F.R. § 131.10(k).

The EPA rules reflect sound policy. The government that is establishing water quality standards is the proper entity to evaluate the attainability of uses associated with those standards. Regulated entities, which are subject to water quality standards and therefore have an interest in less stringent requirements, should not be evaluating attainability.

The Washington Administrative Code, on the other hand, prescribes a different role for the state: reviewing and making decisions on use attainability analyses submitted by non-state actors.⁷ Washington's approach invites significant conflicts of interest, wherein dischargers or other regulated entities can submit skewed use attainability analyses to lessen their compliance burden. Ecology can avoid conflicts of interest by meaningfully scrutinizing use attainability analyses such that Ecology is effectively making its own independent analysis.

Unfortunately, with respect to the Proposal, Ecology has not meaningfully scrutinized Chelan PUD's submission or performed its own robust analyses. Instead, Ecology largely defers to Chelan PUD's interests, analyses, and conclusions. For example, the benefits of the Proposal, per Ecology, are limited to avoiding "noncompliance for Chelan PUD" and "ongoing costs to the Chelan PUD and their ratepayers, as well as increased uncertainty about future energy generation and retail prices."⁸ Ecology disregards potential methods to increase river flow and bring Chelan PUD into compliance with current standards because "Chelan PUD... indicated they would be too costly relative to potential beneficial impact."⁹ As discussed below, Ecology accepts without question Chelan PUD's position as to whether spawning, rearing, and migration is an existing or attainable use.¹⁰

These examples illustrate the level of deference that Ecology is improperly affording to Chelan PUD. Rather than benefitting water quality, habitat, or aquatic life, the Proposal will benefit Chelan PUD's bottom line. Potential methods to improve water quality in Chelan River consistent with current standards are not favored because they will come with implementation costs. It is not a surprise that a regulated entity would take these positions. However, Ecology should not be regurgitating them in lieu of performing its own analysis of the benefits and risks of adopting less stringent water quality standards.

Ecology's inappropriate deference to the Chelan PUD permeates throughout the Proposal. Chelan PUD developed the Chelan River Use Attainability Analysis and Site Specific Criteria Development ("UAA"), so the document naturally serves Chelan PUD's

⁷ WAC § 173-201A-440.

⁸ See, e.g., DEP'T OF ECOLOGY, PRELIMINARY REGULATORY ANALYSES, 10 (Mar. 2021) ("Preliminary Regulatory Analyses").

⁹ *Id.*

¹⁰ See DEP'T OF ECOLOGY, TECHNICAL SUPPORT DOCUMENT, 42-43 (Mar. 2021) ("Technical Support Document").

interests and goals. Ecology, an agency whose purpose is to control pollution,¹¹ cannot accept without scrutiny a regulated entity's request to pollute more freely. Instead, Ecology must meaningfully analyze the UAA and reach its own independent conclusions. Ecology has not done so in the Proposal.

2. The Proposal is not warranted or proper under Chelan PUD's Section 401 certification and other Clean Water Act requirements.

A. Ecology has not meaningfully evaluated whether Chelan PUD implemented all "known, reasonable, and feasible measures" to achieve biological objectives in Chelan River.

According to Ecology's Preliminary Regulatory Analyses, Chelan PUD's Section 401 certification ("401 Certification") for the Lake Chelan Dam required it to "implement reasonable and feasible measures to achieve a series of biological objectives over a 10-year period...to determine the potential for the Chelan River to support aquatic life."¹² If, at the end of the 10-year period, "all known, reasonable, and feasible measures have been implemented" and the biological objectives are not met, then Ecology would revise water quality standards for Chelan River as necessary.¹³ Therefore, if Chelan PUD does *not* implement "all known, reasonable, and feasible measures," then, consistent with the 401 Certification, Ecology would not revise the water quality standards.

Ecology has not shown that it evaluated whether Chelan PUD has implemented all "known, reasonable, and feasible measures" to achieve biological objectives in Chelan River.¹⁴ The 401 Certification's directive regarding "known, reasonable, and feasible measures" included monitoring, evaluation, and adaptive management actions.¹⁵ Ecology notes that Chelan PUD "has completed this adaptive management process and determined that no new reasonable and feasible improvements are available to meet the assigned designated uses and that these assigned uses never existed."¹⁶ What is missing, however, is evidence that *Ecology* determined that no new reasonable and feasible improvements are available. Ecology summarizing Chelan PUD's water quality, biological survey, and habitat assessment findings, without more, is insufficient.

¹¹ RCW § 43.21A.020.

¹² Preliminary Regulatory Analyses, 14.

¹³ *Id.*

¹⁴ The supporting documents for the Proposal include a list of measures from the 2003 Chelan River Biological Evaluation and Implementation Plan ("CRBEIP") that were deemed to be "infeasible or inordinately costly for low or uncertain biological benefit." *See, e.g.*, Technical Support Document, 22. It's unclear why Ecology cites the CRBEIP in discussing Chelan PUD's compliance with the 401 Certification because the CRBEIP predates the 401 Certification. Clearly, the 401 Certification's directive regarding "known, reasonable, and feasible measures" did not include those that a previous study had already rejected as being infeasible.

¹⁵ *See, e.g.*, Public Utility District No. 1 of Chelan County, Chelan River Use Attainability Analysis and Site Specific Criteria Development, i (Dec. 2019) ("UAA").

¹⁶ Preliminary Regulatory Analyses, 37.

Chelan PUD's implementation of all "known, reasonable, and feasible measures" is a condition precedent to Ecology revising water quality standards in the Chelan River. As such, Ecology must clearly and adequately determine that Chelan PUD has indeed implemented such measures before the agency can move forward with the Proposal.

B. Ecology has not meaningfully evaluated whether salmonid spawning, rearing, and migration is an existing use.

An existing use is one that was "actually attained in the water body on or after November 28, 1975," regardless of whether it's included in applicable water quality standards.¹⁷ 2004 guidance from Ecology's Water Quality Program notes that existing uses "include uses not optimally supported...but [are] still present in the water body."¹⁸ State antidegradation policies must maintain and protect water quality levels necessary to support existing uses.¹⁹ Consistent with this requirement, states cannot conduct use attainability analyses to remove existing uses.²⁰

Ecology has not meaningfully analyzed whether salmonid spawning, rearing, and migration is an existing use in the Chelan River that is protected under the Clean Water Act. Ecology's supporting materials for the Proposal largely offer conclusory statements regarding the existing use question. For example, the Draft Rule Implementation Plan states, without explanation, that salmonid spawning, rearing, and migration "were not previously existing uses and were applied without review of local conditions."²¹

The closest that Ecology gets to analyzing the existing use question is in the Technical Support Document. Ecology notes that, per Chelan PUD's evaluation, salmonid spawning, rearing, and migration has been observed in Reach 4.²² However, certain water quality conditions prohibit "full attainment" of salmonid spawning, rearing, and migration.²³ In other words, salmonid spawning, rearing, and migration has occurred in at least a segment of the Chelan River since November 28, 1975 but not to the extent that the use was "actually attained."

The standard for actual attainment is unclear. Ecology regulations on fresh water designated uses provide that:

¹⁷ 40 C.F.R. § 131.3(e).

¹⁸ DEP'T OF ECOLOGY, FREQUENTLY ASKED QUESTIONS ABOUT USE ATTAINABILITY ANALYSIS, 2 (Mar. 2004) (<https://apps.ecology.wa.gov/publications/documents/0410021.pdf>).

¹⁹ 40 C.F.R. § 131.12(a)(1). Washington's antidegradation policy requires that existing uses "be maintained and protected. WAC § 173-201A-310(1).

²⁰ 40 CFR § 131.10(g). *See also* WAC § 173-201A-440(1) ("A use can only be removed through a UAA if it is not existing or attainable.").

²¹ DEP'T OF ECOLOGY, DRAFT RULE IMPLEMENTATION PLAN, 5 (Mar. 2021).

²² Technical Support Document, 43.

²³ *Id.*

[t]he key identifying characteristic of [salmonid spawning, rearing, and migration] is salmon or trout spawning and emergence that only occurs outside of the summer season (September 16 - June 14). Other common characteristic aquatic life uses for waters in this category include rearing and migration by salmonids.²⁴

Chelan PUD interprets this language to mean that “salmonid rearing and migration must be supported throughout the year, including the summer season.”²⁵ The regulations, however, do not require the use to be supported year round. Instead, they only provide that a key feature of the use is salmon or trout spawning and emergence occurring outside of the summer season, and that another feature of the use is rearing and migration by salmonids.

If spawning and emergence occurring outside of summer is a “key identifying characteristic” of salmonid spawning, rearing, and migration, then the occurrence of spawning and emergence outside of summer should show actual attainment of the use. Likewise, if rearing and migration is another “common characteristic” of salmonid spawning, rearing, and migration, then the occurrence of rearing and migration should show actual attainment of the use.

Spawning and emergence outside of summer, as well as rearing and migration, *have* occurred in at least some reaches of the Chelan River since 1975. Chelan PUD’s own data appears to support this conclusion.²⁶ A 1987 paper by U.S. Fish & Wildlife Service also indicates that Chinook salmon were spawning in the Chelan River in the 1980s.²⁷ These behaviors occurring in the Chelan River since 1975 means that salmonid spawning, rearing, and migration is an existing use. This conclusion is consistent with Ecology’s 2004 guidance that existing uses include those uses that are not optimally supported but still present in the waterbody. As an existing use, salmonid spawning, rearing, and migration is protected under the Clean Water Act and state law from removal by Ecology.

²⁴ WAC § 173-201A-200(1)(a)(iii).

²⁵ UAA, 76.

²⁶ *See, e.g.*, UAA, v, 76 (“it is reasonable to assume that some of these fish were the progeny of steelhead that had previously spawned in the Reach 4 habitats.”); *See also* BIOANALYSTS, INC. ET AL., MONITORING AND EVALUATION OF THE CHELAN AND GRANT COUNTY PUDS HATCHERY PROGRAMS 441-77 (Sept. 15, 2020).

²⁷ U.S. FISH AND WILDLIFE SERVICE, STATUTE AND PROPAGATION OF CHINOOK SALMON IN THE MID-COLUMBIA THROUGH 1985, 68 (1987).

C. Ecology has not meaningfully evaluated whether salmonid spawning, rearing, and migration is an attainable use.

States and tribes can remove designated uses that are not existing uses after conducting a use attainability analysis.²⁸ However, EPA regulations place two limitations on states and tribes seeking to remove designated uses. First, a state or tribe must demonstrate that attaining the use is infeasible because of one of six enumerated factors.²⁹ Second, a state or tribe cannot remove a designated use if the use can be attained through implementation of effluent limits.³⁰ Under these standards, Ecology has not justified its conclusion that salmonid spawning, rearing, and migration is not an attainable use.

With respect to the first limitation, Chelan PUD asserts, and Ecology agrees, that salmonid spawning, rearing, and migration is not an attainable use because of two factors: “naturally occurring pollutant concentrations prevent the attainment of the use” (“Factor 1”) and “physical conditions related to the natural features of the water body, such as the lack of a proper substrate, cover, flow, depth, pools, riffles, and the like, unrelated to water quality, preclude attainment of aquatic life protection uses” (“Factor 5”).³¹ According to Chelan PUD and Ecology, Factor 1 is applicable to all four Reaches, with heat being the naturally occurring pollutant, and Factor 5 is applicable to Reaches 1 through 3.³²

Chelan PUD asserts that natural factors contribute to high temperatures in the Chelan River and that the presence of Lake Chelan Dam actually reduces water temperatures.³³ Ecology does not challenge this assertion and instead simply reiterates Chelan PUD’s reasoning.³⁴ The term “naturally occurring pollutant concentrations” is not defined in the Clean Water Act. There are, however, a number of reasons why the concentration of heat in the Chelan River may not be a purely natural occurrence and is instead caused by Lake Chelan Dam.

For example, it’s not clear that the dam elevating Lake Chelan by 21 feet would actually reduce water temperatures because of thermal stratification. At its deepest point, the Wapato Basin is approximately 400 feet deep. Thermal stratification would have always occurred at this depth and elevating the water level by 21 additional feet would have a relatively negligible effect. The additional water would, however, greatly expand the surface area of the lake’s epilimnion. Combined with the increased water

²⁸ 40 C.F.R. § 131.10(g).

²⁹ *Id.*

³⁰ 40 C.F.R. § 131.10(h)(1).

³¹ UAA, 77-79; Technical Support Document, 42-43.

³² *Id.*

³³ UAA, 78-79.

³⁴ Technical Support Document, 43.

retention time caused by the dam, the expansion of the lake's epilimnion could significantly increase temperatures in the Chelan River.

Ecology must carefully evaluate Lake Chelan Dam's impacts to water temperature before it can conclude that excess heat in the Chelan River is "naturally occurring." To better understand these impacts, Ecology might consider analyzing temperature data for the Chelan River at various points in time, such as pre-construction, pre-licensing, and post-licensing. If the excess heat is a by-product of the dam, then Factor 1 is not a legitimate basis for finding that attainment of salmonid spawning, rearing, and migration is infeasible.

Similarly, Ecology has not meaningfully considered whether Factor 5 is a legitimate basis for concluding that attainment of salmonid spawning, rearing, and migration is infeasible for Reaches 1 through 3. As with most other elements of the Proposal, Ecology merely summarizes Chelan PUD's points regarding the physical conditions in Reaches 1 through 3.³⁵ Ecology notes that the "studies conducted by Chelan PUD describes the limitations of salmonids movement upstream and the inability of downstream migrating salmonids to spawn and rear due to insufficient habitat."³⁶ There is no independent analysis of habitat capability or other physical conditions. Ecology must evaluate whether Chelan PUD's conclusions regarding Factor 5 are sound.

With respect to the second limitation, neither Ecology nor Chelan PUD has addressed whether salmonid spawning, rearing, and migration can be attained through implementation of effluent limits. If so, then under 40 C.F.R. § 131.10(h)(1) Ecology cannot remove salmonid spawning, rearing, and migration as a designated use. If not, then Ecology must explain why attainment is not possible even with additional effluent limits.

3. The Proposal is contrary to the policy goals of the Clean Water Act.

The objective of the Clean Water Act is to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters."³⁷ The Clean Water Act therefore sets forth a policy of forward momentum with respect to water quality protection. The high bar for removing designated uses and backsliding to less stringent criteria, described in Section 2 of these comments, exemplifies this policy.

The policy of the Clean Water Act does not support loosening water quality standards to relieve financial and compliance pressures on a regulated entity absent any environmental benefits. This is particularly true where the regulated entity's actions

³⁵ *Id.* at 42.

³⁶ *Id.*

³⁷ 33 U.S.C. § 1251.

potentially created the conditions that are frustrating compliance with applicable standards. Governments should not be rewarding dischargers with relaxed requirements where the discharger has contributed to degradation in a waterbody.

As noted above, the stated benefits of the Proposal are to avoid additional costs and noncompliance for Chelan PUD. Ecology has not cited any environmental or conservation benefits that would flow from the Proposal. Accordingly, the Proposal is entirely inconsistent with the policy of the Clean Water Act. Moreover, it is possible that the existence of Lake Chelan Dam has increased water temperature in the Chelan River. Ecology has not meaningfully analyzed this question in the Proposal. If the dam did contribute to heat pollution, then Ecology should not be rewarding Chelan PUD with less restrictive temperature criteria.

The Proposal would set a troubling precedent wherein regulated entities which contribute to water quality degradation can petition Ecology to revise applicable standards in a way that exclusively benefits the regulated entity. Combined with deference from Ecology on questions of existing or attainable uses, this would effectively put regulated entities in control of water quality regulation in the state. Ecology must consider this precedent and its conflict with the policy of the Clean Water Act before moving forward with the Proposal.

4. Ecology has not explained whether the Proposal is consistent with the 2020 TMDL.

The EPA's 2020 TMDL confirmed that significant portions of the Columbia River are impaired for temperature.³⁸ The EPA concluded that tributaries are not major contributors to temperature impairment, but nevertheless assigned a load allocation for tributaries.³⁹

It is not clear that Ecology considered the EPA's recommended tributary load allocations when it developed the Proposal. This is a significant oversight in light of the impairment status of the Columbia River. Ecology must explain whether the Proposal is consistent with the data and recommendations in the 2020 TMDL and, if it isn't, why the agency disregarded the EPA's conclusions in developing the Proposal.

5. The Proposal lacks necessary mitigation measures to facilitate future compliance and offset adverse impacts.

The Proposal has the potential to negatively impact salmon populations in the Chelan River. If Ecology moves forward with the Proposal, the Yakama Nation recommends

³⁸ ENV'TL PROT. AGENCY, TOTAL MAXIMUM DAILY LOAD (TMDL) FOR TEMPERATURE IN THE COLUMBIA AND SNAKE RIVERS ("TMDL"), 2-5 (May 18, 2020).

³⁹ *Id.* at 30, 61.

that Ecology impose additional mitigation measures on Chelan PUD to ensure that fish survival and habitat are protected.

First, Ecology should require an intake pipe connecting the penstock intake to cooler water than what is currently available at the current intake location. Based on the lake temperature data included in the UAA, the intake pipe would likely need to run several miles up-lake. Its intake elevation would need to be significantly lower than the current low-level outlet elevation. The Yakama Nation recommends further lake temperature studies between stations LC-2 and LC-4 to find temperatures consistently under 15° C during the month of August and closest to Lake Chelan Dam.

Second, Ecology should require Chelan PUD to further investigate the use of groundwater to cool Reach 4. Specifically, Chelan PUD should drill a main test well and several observation wells. Next, it should perform a standard well productivity test, pumping water from the test well and observing the cone of depression recharge at the observation wells. Chelan PUD should then produce and distribute a report for review and comment by Ecology and the Yakama Nation.

Lastly, the Yakama Nation understands that there is active bedload aggradation in Reach 4 which, in time, may impact salmonids' ability to successfully spawn in that area. It is critical that the Proposal not contribute to or exacerbate this habitat condition. Ecology should require a monitoring plan to study the bedload aggradation and its impact on spawning area availability. Based on monitoring results, Ecology may need to implement or require implementation of remedial action.

The Proposal is not warranted or justified. However, if Ecology proceeds despite the deficiencies described herein, then the agency should require these additional mitigation measures to lessen the potential for adverse impacts to fish survival and habitat. Implementation of these measures could also increase the likelihood of meeting existing temperature criteria, thereby allowing for the re-designation and attainment of the spawning, rearing, and migration use. The Yakama Nation acknowledges that two of the measures were previously considered and rejected. However, Chelan PUD's substantial request for a revision of water quality standards warrants re-visiting and exploring the potential efficacy of various mitigation options.

6. Ecology's DNS for the Proposal is inadequate under SEPA.

A SEPA responsible agency can only issue a DNS if it determines that "no probable significant adverse environmental impacts" will result from its action.⁴⁰ A DNS is improper if an agency is unable to show that: its decision to issue a DNS was based

⁴⁰ See WAC § 197-11-340(1).

upon information sufficient to evaluate a proposal's environmental impact; and it considered the relevant environmental factors.⁴¹

Ecology's DNS for the Proposal effectively offers no explanation as to how the agency determined that no probable adverse environmental impacts would stem from downgrading water quality standards for the Chelan River. In many instances, Ecology simply answers questions on the SEPA checklist with "N/A."⁴² Ecology's most robust answers are that the Proposal "will validate the environmental benefits gained for the newly created salmonid habitat for the Chelan River with no probable significant adverse impacts" and "will not cause or result in any physical changes to the river that would cause environmental impacts."⁴³

These are conclusory statements that do not demonstrate that Ecology's DNS was based on adequate information or that the agency meaningfully considered relevant environmental factors. Considering the lack of information available in the other materials for the Proposal, Ecology must re-issue a SEPA-compliant DNS that adequately explains the environment impacts of the Proposal.

7. The Yakama Nation urges Ecology to forego the Proposal.

In light of the deficiencies described above, Ecology should abandon the Proposal and retain salmonid spawning, rearing, and migration as the designated use for Chelan River.

This matter is of great importance to the Yakama Nation. If you have any questions or concerns regarding this comment, please contact Mr. Ethan Jones, Lead Attorney for the Yakama Nation Office of Legal Counsel, at (509) 865-7269, ext. 6014.⁴⁴

Sincerely,



DELANO SALUSKIN, CHAIRMAN
YAKAMA NATION TRIBAL COUNCIL

⁴¹ See WAC § 197-11-330; WAC § 197-11-335.

⁴² DEP'T OF ECOLOGY, DETERMINATION OF NON-SIGNIFICANCE, 7-8 (Mar. 4, 2021).

⁴³ *Id.* at 5,7.

⁴⁴ In submitting these comments, the Yakama Nation does not waive its sovereign immunity from suit, nor does it waive, alter, or otherwise diminish its sovereign rights, privileges, or remedies guaranteed by the Treaty of 1855. Furthermore, submission of these comments does not substitute for formal government-to-government consultation on this matter.