State of Oregon
DEQ Department of Environmental Quality

Temperature Total Maximum Daily Loads Replacement Project: Umpqua River Basin, Water Quality Management Plan

Advisory Committee Member Written Comments

This document provides a compilation of written comments submitted by Rule Advisory Committee members during the designated comment period for RAC Meeting 1. Meeting materials were posted on February 4, 2026, and the RAC convened on February 18, 2026. The comment period was open from February 18 through March 11, 2026.

Original comments are on file with DEQ.

USFS

I have reviewed the draft Umpqua temperature TMDL WQMP dated Feb 18th 2026. I appreciate that our comments were incorporated into the updated section 8.4 for the adequacy of existing plans. I have no further comments on section 8.4.

I do have a few questions regarding the shade assessment requirements for USFS. On page 26 paragraph 2, USFS is not listed among agencies required to complete a shade gap analysis in streamside areas where EPA did not provide modeled results and there DEQ determined that existing management may be inadequate to meet load allocations. However, in table 6 on page 30, USFS is listed among agencies required to submit a shade gap analysis project plan. Can table 6 be updated to match the statement on page 26?

With regards to shade gap analysis, it is my understanding that the USFS can use existing TMDL shade results. It this correct? These are results averaged by management agency (for the USFS that shade gap is 7%) or by specific modeled stream reaches.

Knowing that the existing TMDL shade results do not reflect changes from recent large wildfires, I plan to use post-fire assessments to inform the streamside evaluation. The Umpqua national forest has an assessment from 2020 and 2021 wildfires that highlights streams segments that have experienced high levels of post-fire tree mortality. In the implementation plan for the USFS, I plan to use this post-fire assessment to prioritize areas for shade enhancement through riparian planting. I would appreciate any thought you have on this strategy.

Thanks for looking into these follow-up questions.

BLM

Please substitute the attached text for the text in Section 8.3. The attached text better describes our management, and it includes the last row of Table 5 which is missing from Table 5 in the draft WQMP. Let me know if you have questions. Thanks.

8.3 U.S. Bureau of Land Management

The Northwestern and Coastal Oregon Record of Decision and Resource Management Plan (NCO RMP; BLM, 2016a) and the Southwestern Oregon Record of Decision and Resource Management Plan (SWO RMP; BLM, 2016b) guide the Bureau of Land Management's stewardship of streamside vegetation on federal lands within the Umpqua River Basin. The NCO RMP applies to BLM-administered lands in the Coos Bay District, the Northwestern Oregon District, and the Swiftwater Field Office of the Roseburg District. The SWO RMP provides direction for lands managed by the South River Field Office of the Roseburg District, the Medford District, and the Klamath Falls Field Office of the Lakeview District.

The BLM defines the Riparian Reserve—a riparian management area—based on three factors: physical features, site-potential tree height, and subwatershed class (see Table 5). The Riparian Reserve protects shade-producing vegetation along streams, lakes, ponds, and wetlands. For fish-bearing and perennial streams and certain intermittent, non-fish-bearing streams, the Riparian Reserve extends upslope from the ordinary high water line on both sides of the stream for a distance equal to one site-potential tree height. This height represents the average maximum height of the tallest dominant trees (200 years or older) for a given site class. The Umpqua River Basin site-potential tree heights range from 150 to 220 feet, depending on site productivity. Subwatershed classes reflect their importance to the conservation and recovery of ESA-listed fish:

- **Class I:** Includes both designated critical habitat and high-intrinsic potential streams.
- **Class II:** Includes either designated critical habitat or high-intrinsic potential streams, but not both.
- **Class III:** Includes neither designated critical habitat nor high-intrinsic potential streams.

Table 5. Riparian Reserve distance by water feature.

Feature	Riparian Reserve Distance measured as slope distance
Fish-bearing streams and perennial streams	One site-potential tree height distance from the ordinary high water line or from the outer edge of the channel migration zone for low-gradient alluvial shifting channels, whichever is greatest, on each side of the stream
Intermittent, non-fish-bearing streams	Class I and II subwatersheds: One site-potential tree height distance from the ordinary high water line on each side of the stream
	Class III subwatersheds: 50 feet from the ordinary high water line on each side of a stream
Unstable areas that are above or adjacent to stream channels and are likely to deliver material such as sediment and logs to the stream if the unstable area fails	The extent of the unstable area; where there is stable area between such unstable areas and a stream, and the unstable area has the potential to deliver material such as sediment and logs to the stream, extend the Riparian Reserve from the stream to include the intervening stable area as well as the unstable area
Lakes, natural ponds and reservoirs	100 feet extending from the ordinary high water line

Feature	Riparian Reserve Distance measured as slope distance
> 1 acres, and wetland > 1 acres	
Natural ponds < 1 acres, wetlands < 1 acres (including seeps and springs), and constructed water impoundments (e.g. canal ditches and pump chances) of any size	25 feet extending from the ordinary high water line

The BLM does not allow patch cutting or clearcutting in Riparian Reserves. Thinning and individual tree removal may occur, but only when needed for safety, operational reasons, or to meet specific management objectives. Across all subwatershed classes, thinning within 120 feet of fish-bearing and perennial streams is limited to activities that support restoration or habitat improvement. Thinning in Riparian Reserves is also allowed along intermittent, non-fish-bearing streams in Class I and II subwatersheds, provided it meets established criteria including stand retention requirements.

The Riparian Reserve ends beyond 50 feet for Class III intermittent, non-fish-bearing streams, beyond 100 feet for lakes, natural ponds, reservoirs, and wetlands greater than one acre, and beyond 25 feet for natural ponds and wetlands less than one acre.

The TMDL assigns a 0.0 °C human use allowance for solar loading from nonpoint sources, including loss of streamside vegetation. DEQ considers a 120-foot slope-distance buffer generally sufficient to prevent stream warming and achieve TMDL load allocations as expressed through effective shade targets (TMDL, Appendix C).

Site-potential tree heights on BLM-administered lands within the Umpqua River Basin exceed 120 feet. As a result, DEQ finds that minimum Riparian Reserve widths for fish-bearing and perennial streams, as well as intermittent, non-fish-bearing streams in Class I and II subwatersheds, are likely adequate to meet TMDL load allocations. In contrast, Riparian Reserve widths for intermittent, non-fish-bearing streams in Class III subwatersheds, as well as Riparian Reserve widths for lakes, natural ponds, reservoirs, and wetlands, are less than 120 feet and likely inadequate to meet TMDL load allocations. TMDL load allocations apply to intermittent streams with surface flow or residual pools during the critical period (May 1–October 31).

BLM's implementation plan should describe management strategies for intermittent, non-fish-bearing streams in Class III subwatersheds, as well as lakes, natural ponds, reservoirs, and wetlands, to ensure compliance with TMDL load allocations. The plan should also emphasize strategies to protect, maintain, and enhance existing streamside vegetation, and restore shade lost to legacy land use practices and natural disturbances.

BLM also requested that comments provided through the RAC meeting chat be included:

Re: proposed management strategies: Riparian habitat removal—Preferentially avoid crossing streams for forestry operations (see Avoid stream crossings by roads... on page 40 of the Draft WQMP). Decommission/obliterate roads that are no longer needed for resource management, consistent with valid existing rights. Removing streamside roads or portions of roads can reestablish floodplains, and removing stream crossing structures and associated fills restores stream function including sediment routing to receiving streams. Modifications to flow/discharge—Determine if the network of existing stream gages is adequate to capture beneficial flow changes. Financially support current stream gages. Consider bringing a limited amount of new stream gages online. Consider using staff plates and trail cameras to document flow conditions.

Continued: Consider adding the December 2024 Climate Change Vulnerability and Adaptation in Coastal Oregon and the February 2022 Climate Change Vulnerability and Adaptation in Southwestern Oregon publications to a referenced documents section. The Umpqua River Basin TMDL for Temperature references the 2022 publication but not the 2024 publication. Chapter 9 in Coastal Oregon presents adaptation options that may be relevant for Table 2, and the individual chapters in Southwestern Oregon present adaptation options.

BDAs are a good management strategy for habitat and they likely create habitat with a diversity of water temperatures. I am not sure if the TMDL looked at temperature studies connected with BDAs. Might be worth including.

Re: monitoring and analysis: Draft WQMP p. 13—Modeled shade gap data reflects conditions from past data sets. They may not reflect more recent vegetation changes from wildfire, restoration, land use change, or policy shifts. Field-based measurements (Draft WQMP p.26) on all Class 3 intermittent streams are unlikely given BLM staffing levels, anticipated budgets, and administration priorities. Remote sensing that utilizes the most current data is possible, with some field verification. UAS overflights may also be possible. Relatively recent flow models can also be used to look at anticipated surface flow of Class 3 intermittent streams during the critical period.

Re 10%: The TMDL does not quantify thermal loading from climate change, but climate-induced tree mortality in southwestern Oregon may affect landowner ability to deliver the 10% cumulative improvement in effective shade every 10 years. I will need to get with our Roseburg and Medford Districts to discuss tree mortality in the Riparian Reserve and consequences for achieving shade targets. Page 12 of the Draft WQMP addresses this situation—DEQ will not consider shade reductions caused by natural disturbances as a violation or failure to implement a plan. In such cases, responsible persons should assess and prioritize these areas for restoration or protection following the disturbance.

Re: effective tracking: Denise Dammann Consulting has been collecting and analyzing water temperature data in the Umpqua basin for several years. I believe Denise took over water temperature studies from InSight Consultants. It may be possible for the BLM to establish a financial assistance agreement with DDC or another consultant to establish a basin-wide monitoring plan.

OR Department of Agriculture 1 of 2

The following comments apply to Section 4.2, Table 2

Where are the riparian restoration success stories in the Umpqua Basin? Where has this worked? What methods successfully reestablished a riparian buffer? Invasive bb control, tree/shrub survival, irrigation?, competition? What are the failed projects as well? What can we learn from the failures?

The Umpqua Basin would benefit from an organized riparian planting crew that is fully funded and skilled to successfully restore riparian areas throughout the Umpqua Basin. Make it easy for landowners. Use successful methods.

Cindy Bright at the Douglas Soil and Water Conservation District is a great resource for connecting with agricultural landowners and getting riparian restoration projects implemented. Cindy has decades of project implementation experience. More funding for riparian restoration is needed. We need to make it easy and streamlined for landowners to get these projects in place.

The following comments apply to Section 7, Table 3

Highlighted text: livestock stables and pastures. Comment provided: also vineyards, fruit, vegetable, hay, hemp, grass seed, etc. Any type of Ag. CAFO is separate program. Should it be explained here?

Ag activities on private lands, regardless of zoning. Not federal or tribal lands.

Suggested language: "Agricultural activities on private or state lands, both commercials and non-commercial, including livestock, horses, pastures, hay, vineyards, field crops, hemp, etc., regardless of zoning. The CAFO program is a separate program in ODA that has jurisdiction over dairies and other types of confined animal feeding operations."

The following comments apply to Section 8.1

Text highlighted: TMDL allocations also apply to intermittent streams with surface flow or residual pools during the critical period (May 1–October 31), but these streams are not protected under the current rules. Comment provided: If there is surface flow are these not considered perennial? Also, some with residual pools may be considered perennial as well. ODA would consider the rules to apply to any perennial stream that the TMDL applies to.

Text highlighted: In the case of the Umpqua Basin temperature TMDL, DEQ has determined that taken together, the Area Rules, Area Plan[s], and biennial reports do not provide reasonable assurance to adequately achieve TMDL load allocations in all locations under ODA's jurisdiction. Comment provided: How has this been determined? What process was used to determine that that the area plan and rules do not provide reasonable assurance? Or is this because of a lack of resources for implementation?

Text highlighted: Therefore, ODA is required to prepare a TMDL implementation plan for DEQ review and approval. DEQ will assist ODA in developing an approvable TMDL implementation plan that includes appropriate measurable objectives and timelines to address identified water quality priorities and allocations (surrogate measures). In addition, DEQ will work with ODA to identify additional regulatory measures that could be implemented by rule revisions, incentive programs, and resources that may be available to help with program and project implementation to provide reasonable assurance of achieving TMDL targets. Comment provided: This is not part of the MOA. The MOA does not state the DEQ gets to make a conclusion of what process ODA will use to address the TMDL.

OR Department of Agriculture 2 of 2

I am writing to express ongoing concerns related to the TMDL management plans. I have attached the language from the Ag sections of the John Day, Umpqua, and Snake River TMDL Water Quality Management Plans with comments.

The main concern is that in all three the following is essentially stated: "As agreed, in the 2023 Memorandum of Agreement between DEQ and ODA, ODA will either adapt the Area Plan and Area Rules to act as the TMDL implementation plan or develop a separate TMDL implementation plan." Then a determination that DEQ makes that current ODA WQ program Area Rules combined with implementation of Area Plans' voluntary measures are not adequate in all locations to meet the streamside vegetation requirements necessary to achieve TMDL effective shade targets, load allocations, and temperature water quality standards. Lastly, stating ODA is required to develop a separate TMDL implementation plan to be submitted to DEQ for review and approval.

The language in the above paragraph continues to be contrary to the agreed upon process and language in the ODA - DEQ MOA on Collaboration on Achieving Water Quality Goals Relating to Agricultural Nonpoint Source Pollution. The MOA and existing OARs do not state that DEQ will require ODA to develop at TMDL implementation plan. OARs state that ODA is not required to do so. In the MOA, ODA agreed to either adapt Area Plans and Area Rules or develop a separate TMDL implementation plan.

In addition, the statement that Area Rules and implementation of voluntary measures are not adequate to meet requirements necessary to achieve TMDL needs does not have any background in how this was determined. What process was used to come to this conclusion? Could this simply be that there has been a lack of resources for implementation. Both on the regulatory and voluntary side of the program?

The second concern that we have is with the John Day and Umpqua Water Quality Management Plan sections on Implementation Plan Requirements.

This diagram is from the Umpqua TMDL Water Quality Management Plan, but in process applies to the John Day as well. Currently, we do not plan on including Shade Gap Analysis and streamside evaluation or intent to implement a 120-foot streamside buffer into our implementation plans due to a lack of resources and capacity. We are not against the concept of shade gap analysis and streamside evaluation, but we do not have the resources and capacity with existing staff to complete these tasks.

Thanks,

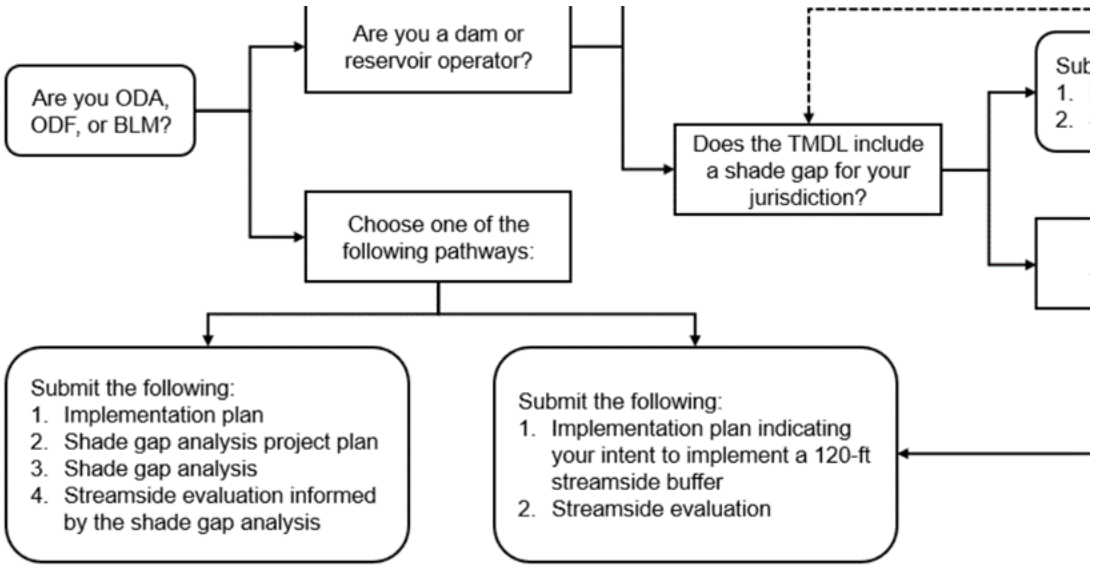

Figure 2. Decision tree to identify additional monitoring and assessment requirements

PacifiCorp

PacifiCorp appreciates the opportunity to participate in the Rules Advisory Committee (RAC) for and provide comments on the Draft Water Quality Management Plan (WQMP) for the 2025 Umpqua River Basin Total Maximum Daily Load (TMDL) for Temperature. The following comments, questions, and suggested edits are provided for Oregon Department of Environmental Quality (DEQ)'s consideration in preparation of the Final WQMP. PacifiCorp's input is provided sequentially as it appears in the WQMP and not necessarily in order of importance to the successful implementation of the WQMP. Proposed edits to the WQMP text are indicated in underlined, italics font.

PacifiCorp encourages DEQ to provide .doc files of the Draft WQMP to facilitate the RAC's review and input. Allowing users to track changes and provide mark-up of a .doc or equivalent word processing file is much easier and more collaborative than requiring comments on a locked .pdf file. Many of PacifiCorp's suggested

edits provided herein are simple corrections or grammatical suggestions that would not require additional transcription effort had DEQ provided a .doc file to the RAC.

Page (p.) 8, paragraph (par.) 1, sentence (sen.) 4 reads, “This list is not exhaustive, and alternative or additional practices may be if they achieve equivalent or better outcomes and comply with applicable rules.” PacifiCorp suggests, “This list is not exhaustive, and alternative or additional practices may be *proposed and implemented* if they achieve equivalent or better outcomes and comply with applicable rules.” A verb was missing from the sentence.

p. 9, par. 1, sen. 1 reads, “Surface water impoundments contribute to elevated stream temperatures where reservoir operations increase exposure to warm surface water and reduce delivery of cold water during the critical period.” PacifiCorp suggests, “Surface water impoundments *may* contribute to elevated stream temperatures where reservoir operations increase exposure to warm surface water and reduce delivery of cold water during the critical period.” There are many contributing variables to surface water impoundment temperature changes. The word “may” accounts for variability in the sentence.

p. 9, par. 2, sen. 2 reads, “Implementation strategies include modifying outlet structures for selective withdrawal of cooler water, adjusting release timing and volume to avoid warming, and coordinating operations with downstream conditions.” PacifiCorp suggests, “Implementation strategies include*, but are not limited to,* modifying outlet structures for selective withdrawal of cooler water, adjusting release timing and volume to avoid warming, and coordinating operations with downstream conditions.” The introductory paragraph of Section 4.2 acknowledges that the management strategies in Table 2 are “not exhaustive, and alternative or additional practices may be [implemented] if they achieve equivalent or better outcomes and comply with applicable rules.” The suggested edit makes this point explicit within the narrative.

p.10, par. 3, sen. 2 reads, “The TMDL (TMDL, Section 7.1.7) determined that reduced flows from withdrawals contribute to elevated temperatures during the critical period in several locations (TMDL, Table 27).” PacifiCorp suggests, “The TMDL (TMDL, Section 7.1.7) *determined calculated* that reduced flows from withdrawals contribute to elevated temperatures during the critical period *in several locations on representative modeled streams* (TMDL, Table 27).” The U.S. Environmental Protection Agency (EPA)’s analysis in the TMDL relied on modeling and not exclusively on current monitoring data throughout the basin (see TMDL p. 82). PacifiCorp’s suggested edit clarifies these points.

p. 10, par. 5, sen. 1 reads, “Restoring baseflows, reducing seasonal withdrawals, and improving hydrologic function are strategies to meet load allocations.” PacifiCorp suggests, “Restoring baseflows, *reducing altering* seasonal withdrawals, and improving hydrologic function are strategies to meet load allocations.” PacifiCorp has collected data at one location demonstrating that increasing seasonal withdrawals may reduce downstream stream temperatures and aid in meeting load allocations. This scenario may occur when upstream conditions (e.g., lower stream gradient, broader channel, reduced streamside shading, etc.) result in warmer stream temperatures upstream of a diversion that when diverted from the channel provide for colder stream temperatures downstream of the diversion due to downstream conditions (e.g., higher stream gradient, narrower channel, increased streamside shading, colder water temperature inputs from springs and tributary streams, etc.) and variations in volumetric flow rate. In other words, diverting increased volumes of warm water from the stream allowed colder water inputs downstream of the diversion to exert more influence on the overall stream temperature. The suggested edit captures this potential management strategy while retaining the intent of the draft sentence.

p. 14, par. 3, sen. 1 reads, “DEQ will establish timelines for dam and reservoir operators on a case-by-case basis based on site-specific conditions and operational constraints.” PacifiCorp suggests, “DEQ will establish timelines for dam and reservoir operators on a case-by-case basis based on site-specific conditions*, and* operational constraints*, and existing state and federal authorizations*.” This edit accounts for the terms and

conditions of existing authorizations for dam and reservoir operators including Federal Energy Regulatory Commission (FERC) licenses and DEQ's associated Clean Water Act Section 401 Water Quality Certification of FERC licenses.

p. 14, par. 4, sen. 4 reads, "For nonpoint sources, meeting load allocations expressed through surrogate measure targets demonstrate compliance." PacifiCorp suggests, "For nonpoint sources, meeting load allocations expressed through surrogate measure targets demonstrate*s* compliance." The verb "demonstrates" matches the third-person, singular, present tense "meeting."

p. 14, par. 5, sen. 1 introduces the term "DMAs" without defining it. PacifiCorp suggests, "OAR 340-042-0040(4)(I)(G) requires each WQMP to identify the persons, including *Designated Management Agencies (*DMAs*)*, responsible for implementing management strategies and preparing implementation plans."

p.14, par. 6, sen. 1 should then read, "*Designated Management Agencies DMAs* are public entities formally designated by DEQ to implement TMDLs."

p.15, Table 3, title reads, "Responsible persons required to submit a TMDL implementation plan." PacifiCorp suggests, "Responsible persons required to submit a TMDL implementation plan *or monitoring plan (indicated with an "*")."* The title of the table suggests that all of the identified responsible persons will need to submit an implementation plan. Incorporation of the suggested edit adds clarity. PacifiCorp also suggests that the subsequent table note at the top of p.16 should read, "PacifiCorp and Douglas County must perform reservoir monitoring and assessment (Section 10.2.2). DEQ will use *the monitoring and assessment* results*, in conjunction with the requirements of existing state and federal authorizations,* to determine whether implementation plans are required." Consistent with PacifiCorp's comments on p. 14, par. 3, sen. 1, this edit accounts for the terms and conditions of existing authorizations for dam and reservoir operators including Federal Energy Regulatory Commission (FERC) licenses and DEQ's associated Clean Water Act Section 401 Water Quality Certification of FERC licenses.

p. 16, par. 7, sen. 2 reads, "PacifiCorp is an existing responsible person that operates under a DEQ-issued Section 401 Water Quality Certification (FERC License No. 1927)." PacifiCorp suggests, "PacifiCorp is an existing responsible person that operates under a *Federal Energy Regulatory Commission (FERC) license (No. 1927) conditioned by a* DEQ-issued *Clean Water Act* Section 401 Water Quality Certification *(FERC License No. 1927)*. The suggested edit clarifies that the FERC license authorizes PacifiCorp to operate the North Umpqua Hydroelectric Project and that DEQ has certified the Project complies with Section 401 through implementation of the terms and conditions of the certification.

p. 16, par. 8, sen. 1 reads, "This WQMP requires all new and existing responsible persons named in Table 3 to submit TMDL implementation plans to DEQ for review and approval." PacifiCorp suggests, "This WQMP requires all new and existing responsible persons named in Table 3*, with the exception of those required to first prepare monitoring and assessment plans,* to submit TMDL implementation plans to DEQ for review and approval." PacifiCorp notes that there is additional clarity needed on the sequential nature of and differences between monitoring and assessment plans and implementation plans. The suggested edit contributes to clarity on these points.

p. 21, par. 6, sen. 2 reads, "Depending on the monitoring and assessment results in Section 10.2.2, DEQ may also require select dam and reservoir operators to develop implementation plans." PacifiCorp suggests, "Depending on the *results of* monitoring and assessment *results as described* in Section 10.2.2, DEQ may also require select dam and reservoir operators to develop implementation plans." The suggested edit clarifies that Section 10.2.2 provides details on the required monitoring and assessment plans and not the results of any specific monitoring or assessment.

p. 22, Section 10, title reads, “Implementation plan requirements.” PacifiCorp suggests, “Implementation *and monitoring* plan requirements.” Section 10.2.2.1, titled “Dam and reservoir monitoring and analysis,” includes details on required monitoring and assessment plans. Therefore, only including implementation plans in the section title adds to confusion regarding the sequential nature and differences between monitoring and assessment and implementation plans. Alternatively, DEQ could create a new section to discuss monitoring and analysis plans separate from implementation plans to further distinguish between the two.

p. 23, Figure 2 does not include dichotomous “yes” or “no” labels at each branch of the decision tree. PacifiCorp suggests revising the figure to include “yes” or “no” at each branch of the decision tree.

p. 27, par. 3, sen. 1 reads, “To identify which operators must conduct monitoring, DEQ used data from the Oregon Water Resources Department and the National Inventory of Dams (Appendix C) and applied the following screening criteria. . .” PacifiCorp suggests, “To identify which operators must conduct monitoring, DEQ used data from the Oregon Water Resources Department and the National Inventory of Dams (Appendix C) and applied the following *exclusionary* screening criteria. . .” The suggested edit clarifies that the criteria in the list would exclude facilities from monitoring.

p. 27, par. 5, sen. 2 reads, “Therefore, DEQ requires PacifiCorp to monitor and assess the entire project, including all dams and appurtenant structures.” PacifiCorp suggests, “Therefore, DEQ requires PacifiCorp to monitor and assess *the entire project, including all dams and appurtenant structures locations within the project that may affect the project’s compliance with the surrogate measure.*” The phrase “all dams and appurtenant structures” is too broad and encompasses facilities (e.g., off-channel forebays) that may not impact monitoring of compliance with the surrogate measure. As provided in Section 10.2.2.1, dam and reservoir operators may propose monitoring methods and locations for DEQ review and approval, but the sentence in question, as written, may restrict PacifiCorp’s latitude in developing a monitoring and assessment plan informed by PacifiCorp’s knowledge of project operations and implementation of DEQ’s water quality certification of the project.

p. 27, Section 10.2.2.1, title reads, “Dam and reservoir monitoring and analysis.” PacifiCorp suggests, “Dam and reservoir monitoring and assessment.” The phrase “monitoring and assessment(s)” is used 24 times throughout the WQMP. “Monitoring and analysis” is used only three times in the WQMP: twice in 10.2.2.1. and once in the first sentence of 10.2.2.2. Therefore, the suggested edit is provided for consistency and should be implemented in the three identified locations. If there is a difference between “monitoring and analysis” and “monitoring and assessment,” PacifiCorp requests that DEQ edit the WQMP to clarify the differences between the two.

p. 27, par. 8, sen. 3 reads, “Stratified reservoirs may cool rivers in the summer by releasing colder deep water, but they can also release warmer surface waters in the fall when reservoirs mix.” PacifiCorp suggests, “Stratified reservoirs may cool rivers in the summer by releasing colder deep water, but they can also release warmer surface waters in the fall *when reservoirs mix if stratified reservoirs are subject to mixing at depths of the reservoir outlet*.” As previously noted in PacifiCorp’s comments to EPA on the draft temperature TMDL, at Lemolo Reservoir, which is the only project reservoir subject to notable thermal stratification, the discharge is still approximately 85 feet below the normal minimum water surface elevation and well below the mixing zone within the water column during the winter drawdown as fall weather patterns and wind result in mixing within the water column. PacifiCorp suggested edit provides for known variables while retaining the intent of the sentence.

p. 28, par. 3, sen. 1 reads, “Each monitoring and assessment plan must include a plan to collect continuous upstream and downstream temperature data for at least four consecutive years.” PacifiCorp notes that the WQMP does not specify the frequency of reporting during implementation of a monitoring and assessment plan. If the reporting frequency is intended to be annual for four years, once at the end of four years of

monitoring and assessment, or plan-specific for review and approval by DEQ, PacifiCorp requests that DEQ edit the WQMP for additional clarity on this point.

p. 28, par. 7, Item 2 includes two implementation pathways for scenarios in which monitoring shows operations increase outflow temperatures. PacifiCorp suggests a third pathway, "*c. Demonstrate that operations are in compliance with an existing federal or state authorization*." This proposed edit provides for the legal complexities associated with modifications to existing water quality certification of FERC-licensed hydroelectric projects. In Section 121.10 of EPA's proposed update to its Clean Water Act Section 401 regulations (Docket ID No. EPA-HQ-OW-2025-2929), EPA's proposed regulations would (1) require the applicant, in addition to the federal licensing or permitting agency, to agree to a modification of certification conditions and (2) require the applicant to agree to the specific language of the modification. PacifiCorp's proposed edit acknowledges FERC's responsibilities as the federal licensing agency for non-federal hydroelectric projects pursuant to the Federal Power Act (FPA).

p. 30, par. 4 is somewhat duplicative to the previous paragraph and briefly addresses complex legal issues and activities that may be inconsistent with the FPA (e.g., modifying a water quality certification; see PacifiCorp's comments on p. 28, par. 7, Item 2). PacifiCorp suggests removing this paragraph.

p. 30, par. 5, sen. 1 identifies the "Protecting Cold Water" criterion, which is later referred to as "PCW." PacifiCorp suggests, "The Protecting Cold Water *(PCW)* criterion (OAR 340-041-0028(11)) applies to waters that have summer seven-day-average maximum ambient temperatures that are colder than the biologically based criteria," to define the subsequent acronym.

p. 30, par. 6, sen. 1 identifies dams where the PCW criterion potentially applies. In the same manner that DEQ has eliminated the screening criteria for individual dams on the project (see p. 27 and comments provided herein), PacifiCorp suggests that DEQ should similarly identify that the PCW criteria may apply within the overall project area instead of identifying specific waters. PacifiCorp suggests replacing the sentence and bullet list with, "The TMDL *identifies five dams where notes that* the *Protecting Cold Water PCW* criterion potentially applies in upstream waters entering the reservoir*s of the North Umpqua Hydroelectric Project,. . .*" As PacifiCorp noted in its comments to EPA on the draft temperature TMDL, no anadromous salmon or steelhead are present upstream of Toketee Dam, Slide Creek Dam, or Stump Lake Dam (i.e., Clearwater No. 1 Dam). EPA's response to PacifiCorp (TMDL Response to Comments, Comment Number 5.3, p. 34) noted that "data/information and associated meta data on fish populations is needed" to make a full determination regarding application of the PCW criterion and "as part of TMDL implementation, Oregon DEQ will verify the application of the criterion." PacifiCorp can provide data supporting applicability of the PCW in any project stream reaches in its monitoring and assessment plan, and therefore, identifying waters where the PCW may apply in the WQMP is premature. If DEQ declines to edit this sentence and remove the bullet list, please note that the first bullet for Stump Lake should be edited to read "Clear*water* River."

p. 30, par. 7, sen. 1 reads, "DEQ assumes the Protecting Cold Water criterion applies unless DEQ determines that sufficient demonstrate the criterion is not applicable." PacifiCorp suggests, "DEQ assumes the Protecting Cold Water criterion applies unless DEQ determines that sufficient *evidence* demonstrate*s* the criterion is not applicable." The sentence was missing a noun and appropriate verb tense.

p. 32, Figure 3 does not include monitoring and assessment plans. Consistent with PacifiCorp's comments on p. 28, par. 3, sen. 1, the reporting frequency for monitoring and assessment is unclear. PacifiCorp suggests including monitoring and assessment schedules in Figure 3 or a separate figure to delineate the differences between implementation plans and monitoring and assessment plans.

p. 46, Appendix A, Line 28 should identify "PacifiCorp" (i.e., "Pacific*c*Corp").

pp. 50-52, Appendix C is inconsistent with removal of the exclusionary criteria from the project (see p. 27 and comments herein) and includes errors and omissions. For consistency with p. 27, PacifiCorp suggests editing the second sentence of the introductory paragraph to read, “Of the*se identified owners*, DEQ *will* require*s* Douglas County and PacifiCorp to *prepare* monitor*ing* and assess*ment plans, which may or may not include the reservoirs identified here, to measure operational compliance with the surrogate measures temperature effects of their operations.*” The list in Appendix C includes North Umpqua Hydroelectric Project forebays, which are off-channel and less than 5,000 acre feet of storage (Clearwater No. 1 Forebay, Clearwater No. 2 Forebay, Fish Creek Forebay, Lemolo No. 1 Forebay, and Lemolo No. 2 Forebay). The list does not include Lemolo No. 2 Diversion Dam on the North Umpqua River and Clearwater No. 2 Diversion Dam, both of which are taller than Fish Creek Diversion Dam, which is included on the list. **Line 26** should identify the reservoir name as “Lemolo” (i.e., “Lemolo *No 1*”). **Line 28** does not identify “Hydroelectric” as the primary purpose or “65” acre-feet for the maximum reservoir storage, respectively, for Lemolo No. 1 Forebay.

Thank you for your consideration of PacifiCorp’s input on the draft WQMP.

Confederate Tribes of Grand Ronde

A few minor suggestions to elevate the importance and standing of Tribes and their cultural lifeways in this document text.

The highlighting is just from my reading the doc, I put a few comments in bubbles.

Page 2, paragraph 3: recreational opportunities – “suggest adding "Tribal cultural lifeways" to this list after recreational...

Page 6, paragraph 1: public – “and Tribal Nations”

Page 6, paragraph 4: Quality of life – “and water security for future generations”

See next page for additional comments

Cow Creek Band of Umpqua Tribe of Indians

See following pages comments

Non-discrimination statement

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The Confederated Tribes of the Grand Ronde Community of Oregon

Office of Ceded Lands
9615 Grand Ronde Road
Grand Ronde, OR 97347

Phone (503) 879-1316

Date: March 11, 2026
From: Keri Morin Handaly, Ceded Lands
To: Oregon Department of Environmental Quality (DEQ), Attn: Sarah Norpchen, Umpqua TMDL Coordinator
CC: Michael Karnosh, Ceded Lands Manager, Stacia Hernandez, Chief of Staff
Re: Tribal review of Umpqua River Temperature TMDL Water Quality Management Plan

Dear Sarah Norpchen:

The Confederated Tribes of Grand Ronde ("CTGR," "Grand Ronde" or "Tribe") thank you for the invitation and inclusion of staff on the Umpqua River Temperature TMDL Water Quality Management Plan Regional Advisory Committee. The following comments are submitted by CTGR Office of Ceded Lands.

Grand Ronde is a sovereign Tribal Nation that is comprised of 30+ bands of Tribal members from across western Oregon. Our treaty ceded lands comprise 14 million acres that span from southwest Washington to northern California. During the 1850s, Tribal leaders signed seven treaties, six of which apply to southern Oregon and include the Rogue River Treaties of 1853 & 1854, the Chasta – Scoton Treaty of 1854, The Umpqua – Kalapuya Treaty of 1854, The Umpqua – Cow Creek Treaty of 1853, and the Molalla Treaty of 1855. These treaties ceded title to the homelands in southern Oregon. Not long afterwards, Tribal bands were forcibly removed to the Grand Ronde reservation. Since time immemorial, the Tribe have stewarded the sacred waters of the Umpqua river basin and its flora and fauna, and tribal members have maintained their deep connections in this area. The Tribe is interested in protecting, enhancing and restoring these natural areas, including all native species, particularly Chinook and Coho salmon and steelhead that are experiences population declines, in part due to warming river conditions from a variety of human disturbances, including removal of riparian buffers (shade) and contributions to climate change.

Tribal staff offer the following comments:

General:
The Tribe appreciates DEQ's efforts to implement and enforce the Temperature TMDLs via a well written and clear Water Quality Management Plan. To center Tribal sovereignty, words like Tribe, Tribal government, Tribal Nation, Indigenous, Native American should be capitalized within the document.

Acknowledgement of the ODFW Coastal Multi-Species Conservation Management Plan (example 2023 Implementation Report) may be useful in this document as it describes partnerships and projects to benefit salmon.1

Specific:

Page 8. Table 2. Priority temperature management strategies
Riparian habitat removal—

1 https://www.dfw.state.or.us/fish/crp/docs/coastal_multispecies/2023%20CMP%20Report.pdf

add “establish minimum buffer standards via local code or agency rules with wider buffers for salmon bearing streams”
add “establish tree & wetland protection codes for new or redevelopment”
add “establish a mitigation program for unavoidable tree removal and wetland filling from new or redevelopment that replants prioritized stream buffers”
“Support landowners with planting programs…” add (See 16.4 Appendix D.)
Add “conduct selective thinning and prescribed fire to reduce hazard fuels and lower wildfire risk”
Add “Plant mixed stand species to increase forest disease and climate resilience”
Add “Consider co-stewardship forest management with Tribal Nations”2
Add “Create a forest management plan”3
Add “Consider a Forest Carbon Project which can include reforestation, avoided conversion and improved management.4

Page 10. #3 Thinning and management
Clarify that accepted guidance on healthy forest density for western Oregon is 10’ on center. See also: https://extension.oregonstate.edu/sites/extd8/files/documents/ec1498.pdf

Section 4.2.3 Channel modification strategies
Include gravel augmentation, especially below dams to improve spawning habitat and help keep water cool. See citation on recent findings in Oregon.5

Page 12. Section 5.2.
Tribal staff support the concept of commitments from DMAs to make “minimum” progress per year and forecasting to 10 years. Based on our experience, individual DMA’s access to funding for this purpose may vary. Suggest that part of the preparation of the implementation plans be a fiscal analysis that reports to DEQ what their annual operating budget is and what funds within their operating budget may be used to support the Temp TMDL work and what steps they can/will take to meet or exceed the surrogate shade goal of 10% per year. It is predictable that some DMAs will have more difficulty attaining adequate funds than others. And, of course, 10% of a high acreage holder, could be very large budget shifts in priorities over the status quo, whereas smaller acreage holders may be able to identify partners and grants. The value in the documentation is that DEQ can evaluate and work with the DMA on commitments for funding enhancements such as adding fees for development that create a fund for restoration and wildlife protection or increasing rates over time, as well as prioritization. DMAs should be supported by those with restoration (out of stream and instream) experience to determine a rough cost estimate for projects identified across the ten-year time frame. The Tribe notes that the ultimate goal is to ensure that DMAs are accountable and are not able to site lack of funding over and over again.

Staff agrees with the implementation of plan inclusion of properties identified with substantial barriers to restoration and the need to identify potential projects that will help mitigate or compensate for those areas. For example, this may create opportunities for creative solutions such as collaborating with non-DMA parties to do in-lieu projects supporting improvements. Likewise, DEQ should consider encouraging DMAs with adjacent and overlapping areas to collaborate on projects that are mutually beneficial and may result in overall cost savings for implementation.

This section also states that if insufficient progress is made, implementation plans must be revised accordingly. It is less clear what DEQ will do if little to no progress is made, for example within the first 5-6 years? NPDES nonpoint source permits require explanations of how commitments will be made up over time, therefore holding permittees accountable for that progress.

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2 https://www.fs.usda.gov/r06/rogue-siskiyou/newsroom/releases/tribal-forest-protection-act-co-stewardship-projects-tribes
3 See OSU support page: https://blogs.oregonstate.edu/forestplanning/
4 See OSU/WSU/UID pub: https://extension.oregonstate.edu/sites/extd8/files/documents/sloanj/pnw775_4.pdf
5 Wohner, P. J., P. A.Samarin, and J. T.Peterson. 2026. “A Tool for Prioritizing Gravel Augmentation Reaches for Sediment Starved Rivers.” River Research and Applications1–14. https://doi.org/10.1002/rra.70121.

Page 22. Section 10 Implementation plan requirements

Tribal staff appreciate the details included in this section. In addition to identifying priority areas, it would be useful to request DMAs to include maps that demonstrate the location of planned projects and highlight areas with likely insurmountable barriers.

Page 31. Section 10.4 Implementation plan performance monitoring and review
To ensure ease of DEQ review, as well as usefulness to public stakeholders and Tribal Nations, DEQ should standardize DMA annual reporting of metrics such as total streamside acres, total restoration completed or in progress, policies passed, acres conserved/protected, total expenditures for new, for maintenance, adaptive management proposed. Ensure consistency for the 5-year reporting to enable DEQ to present data in written and visual formats to demonstrate progress being made. An aspirational suggested goal is that DEQ establish who is able to monitor temperature in the basin and establish a map that will be published with the 5-year assessment that contains recurring monitoring points to measure progress over time and compare air temps for understanding of climate variances from year to year as compared to river temps.

Page 45. Section 16.1 Appendix A: List of responsible persons, including DMAs
Assessing the streamside acreage for each responsible party, seems to have two outliers of those who are required to write a TMDL Implementation Plan (IP), thus DEQ should offer an explanation as to why these entities were excluded: Central Oregon Pacific railroad (1,012 acres) and Port of Umpqua (953 acres). Note, there is a bulleted list on page 16 with reasons for exclusion from creating an IP. These could be numbered, and the applicable number could be added to this table. Tribal staff also note that the railroad might fall under "safety concerns" and that is understandable, however, as a partially responsible entity, they could partner (as could others) to assist in financing some other DMAs projects as mitigation for the barrier on their land.

Page 50. Section 16.3 Appendix C: List of large dams and reservoirs in the Umpqua Basin
Tribal staff note that in-line ponds have significant ability to impact stream temperature. As this section is currently presented, it is not clear why so many of these have been excluded from temperature analysis, which are not in-line and what the avg depth of the ponds are, all of which are helpful in determining the potential relative impact to temperature.

COW CREEK BAND OF UMPQUA TRIBE OF INDIANS

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March 10, 2026

To: Sarah Norpchen, Umpqua Basin Coordinator, Oregon Department of Environmental Quality

Subject: Umpqua Basin Temperature TMDL, Rulemaking Advisory Committee member comments

My comments below pertain to the Draft Water Quality Management Plan, an element of the Umpqua Basin Temperature TMDL replacement project.

In regard to Section 4, Table 2 (Priority temperature management strategies) I suggest the following:

Suggestion	Description
Define "overly dense stands" under *Riparian habitat removal* strategies. Define who will be responsible for identifying "overly dense stands". Define a geographic scope for this treatment. Define a target density. Consider adding a reforestation planting strategy to minimize overly dense conditions in the future.	What constitutes "overly dense" and who will decide this in practice? Is there a target number of trees per acre, or is it site-specific? Is it based on species present? (e.g. Would a riparian area of Douglas-fir sufficiently dense to outcompete hardwoods and understory vegetation be considered "overly dense"?) At what distance from stream channels is this treatment planned for? Consider a strategy to limit conifer replanting density near streams to prevent the excessive transpiration of young conifer plantations [Segura et al, 2020] (e.g. replant on 10-foot centers rather than 5-foot centers).
Add gravel augmentation strategy under *Channel modification* strategies, especially below dams.	Gravel-sized substrate particles provide water cooling effects as water moves through the interstitial space between gravel particles. Hyporheic exchange may also increase following gravel augmentation treatment. [Ock et al, 2015] This strategy may be more effective when paired with instream log and boulder placements that catch and retain gravel particles during high flows.

	Gravel augmentation projects can promote benefits beyond temperature regulation, including direct creation of salmonid spawning habitat and filtration of suspended particulate organic matter. There is precedent for this strategy in the Umpqua basin with a PacifiCorp gravel augmentation project below Soda Springs dam.
Add wetland restoration and expansion strategy under *Flow management strategies*	Wetlands heighten the water table and retain moisture longer into the dry season (relative to non-wetlands) by slowing discharge from the upland environment to riparian areas. Wetlands need not be connected by surface water to a stream channel to have this effect. Note this is related to but slightly different than the second strategy listed under *Channel modification* strategies.

Section 7 identifies the persons responsible for implementing management strategies and preparing implementation plans. The document lists the Cow Creek Band of Umpqua Tribe of Indians as not a responsible person, but does not list the Confederated Tribes of Coos, Lower Umpqua, and Siuslaw Indians (a native and sovereign nation with current land ownership in the Umpqua Basin) as such. I recommend clarifying this language.

Review of the remainder of the Water Quality Management Plan did not raise additional comments or concerns.

Sincerely,

Hannah LaGassey, M.A.
Environmental Specialist
Cow Creek Band of Umpqua Tribe of Indians

References

Ock, G., Gaeuman, D., McSloy, J., Kondolf, G. M. (2015). Ecological functions of restored gravel bars, the Trinity River, California.

Segura, C., Bladon, K., Hatten, J., Jones, J., Have, V., Ice, G. (2020). Long-term effects of forest harvesting on summer low flow deficits in the Coast Range of Oregon. *Journal of Hydrology*, volume 585.