

# Meeting Summary

## Temperature Total Maximum Daily Load Replacement: Willamette Mainstem and Major Tributaries



### Rule advisory committee meeting #1, March 14, 2024, virtual meeting (Zoom)

The video recording of this meeting is available from DEQ upon request. Email [Willamette.MainStem@DEQ.oregon.gov](mailto:Willamette.MainStem@DEQ.oregon.gov) with your request for the video.

### List of attendees

#### Rule advisory committee members:

Branden Pursinger	Association of Oregon Counties
Mike Brown	Bureau of Land Management
Kristin Preston	City of Albany on behalf of League of Oregon Cities
Jackie White	Northwest Pulp and Paper Association
Jerry Linder	Oregon Association of Clean Water Agencies
Sharla Moffett	Oregon Business and Industry
Becky Anthony	Oregon Department of Fish and Wildlife
Olivia Jasper	Oregon Department of Agriculture
Rebecca McCoun	Oregon Department of Forestry
Lauren Poor	Oregon Farm Bureau
Tyler Ernst	Oregon Forest and Industries Council
Alyssa Mucken	Oregon Water Resources Department
Briana Weatherly	Portland General Electric
Kathryn Tackley	U.S. Army Corps of Engineers
Travis Williams	Willamette Riverkeeper

#### DEQ staff

Erin Costello, Jim Bloom, Ryan Michie, Priscila Woolverton, Brian Creutzburg, Evan Haas, Steve Mrazik, Michele Martin, Trina Brown, Rob Burkhart

#### EPA staff

Rebecca Veiga Nascimento, Jenny Wu

## Agenda

Time	Topic
1 p.m.	Welcome, introductions, meeting agenda
1:10 p.m.	Draft Total Maximum Daily Load, rule
2:10 p.m.	Draft Water Quality Management Plan, rule
2:50 p.m.	Break (5 min.)
2:55 p.m.	Draft Fiscal and Economic Impact Statement
3:25 p.m.	Wrap up, next steps
3:30 p.m.	Adjourn

## Meeting summary

Michele Martin, DEQ started the meeting introductions and roll call of rule advisory committee members, reviewed logistics and ground rules for the meeting and discussed meeting materials that were posted on March 1, 2024, in advance of the meeting. Michele continued with the project history and schedule. The meeting was opened for questions and there were no questions.

**Erin Costello, DEQ:** Overview of a TMDL, the development process, and how a TMDL fits into the Clean Water Act framework. Erin noted that the Environmental Protection Agency (or EPA) is the federal agency responsible for implementing the Clean Water Act nationwide, and DEQ is the state agency responsible for implementing the Clean Water Act in Oregon. All the TMDL development work that we do at DEQ gets submitted to the EPA for their review and approval. Erin reviewed the project area for the Willamette Mainstem and Major Tributaries and four categories of TMDL development, simplified for this presentation. Erin reviewed the TMDL source assessment calculation used to identify and inform the TMDL loading capacity calculation including nonpoint sources, background sources, point sources, and other TMDL elements. She continued with reviewing sources of heat in the project area, a description of the surrogate measures, and example allocations.

**Ryan Michie, DEQ:** Description of the Long Tom River cool water species narrative standard and temperature target.

**Jim Bloom, DEQ:** Explained how current maximum thermal loads were derived; how proposed waste load allocations (WLAs) were derived from current max thermal loads; modeling performed to evaluate maximum cumulative effects of proposed WLAs; and what permittees can do to determine if DEQ correctly derived max thermal loads for their facilities.

DEQ will try to limit point sources temperature impacts to 0.2°C, when applicable criteria are exceeded. In some cases, up to 0.22°C of temperature impact may be assigned to point sources, but this can limit the amount of Reserve Capacity available. Reserve Capacity is the portion of the human use allowance (HUA) available for increases in pollutant loads from future growth and new or expanded sources. The portion of the HUA for point sources includes temperature impacts due to facilities covered by Individual permits or those covered by general permits, such as non-contact cooling water facilities.

For the evaluation of maximum current point source thermal loads, DEQ evaluated data submitted by point sources through 2020, and in general, the most recent five years were used.

Slides 26 through 29 provided calculations for the evaluation of maximum current point source thermal loads. Slides 30 through 34 provided cumulative effects analysis for the impacts of waste load allocations and example draft wasteload allocations that are in the TMDL, tables 9-11. Finally, Jim provided an opportunity for additional feedback by interested parties and gave specifics about how DEQ can receive additional feedback.

**Priscillia Woolverton, DEQ:** Overview of the Water Quality Management Plan including implementation responsibilities and schedule for Designated Management Agencies to develop implementation plans. She reviewed the rationale for being named a DMA, and DEQ expectations for each entity required to develop a TMDL implementation plan. The requirements including applicable priority management strategies from the WQMP, table 2 and potentially other practices and actions appropriate for activities and landscape conditions specific to the entities' pollutant sources or source sectors. Implementation plans must include specifics on where and when these strategies will be applied. Priscillia discussed riparian vegetation, water withdrawals, channel morphology and hydromodification, a summary of streamside components and proposed streamside shade gap analysis requirements.

**Brian Creutzburg, DEQ:** Cold water refugia are areas in a river that are colder than the main channel's temperature. Adult salmon and steelhead temporarily use cold water refugia to migrate up the Columbia River and its tributaries to their spawning grounds. It's important to mention that the last 50 miles of the Willamette River are designated as a migration corridor.

The water quality management plan includes a set of actions that are known to protect cold water refugia, including some that are readily apparent like protecting streamside shade, especially in tributary watersheds. Other strategies can include enhancing groundwater inputs and facilitating fish access to these pockets of cold water. Parties with jurisdiction along the migration corridor must include elements for protecting and enhancing cold water refugia.

Dam owner requirements started with a large candidate list from the Water Resources Department's dam safety program, then the list was narrowed to a subset that may have the largest impact on water temperature. DEQ excluded dams that are operated to manage seasonal flow to sustain ecological benefits associated with wetlands and marshes. The dam owner requirements include modeling or empirical analysis to characterize temperature dynamics in reservoirs. The characterization will include any operational constraints, and opportunities for adaptive management.

Brian discussed Oregon Watershed Enhancement Board's Oregon Watershed Restoration Inventory database. Adding restoration projects to this database would facilitate DMAs, DEQ, and other group reporting and quantification of temperature-related projects to help track implementation over time. If working on a grant, then OWRI would be included in the grant. Currently this is already required for OWEB funding and 319 funding. If OWRI is required under the final WQMP, then it would apply to all DMAs who practice streamside restoration. Brian closed his portion of the presentation by discussing the schedule for implementation and DMA required monitoring (see presentation slides for more information).

**Rebecca McCoun, ODF:** The amount of work is a lot for the timeline. With the 18 months, do you have to have all of the modeling, streamside assessments? Or just a plan for these actions?

**Priscillia:** The WQMP 18-month timeline includes submitting an implementation plan, a streamside evaluation, a project plan of the assessment methodology to be used to complete a shade gap analysis; due 18-months after EQC adoption. DEQ would like feedback on that for what a timeline would look like in your opinion.

**Michele:** Reminded folks that RAC members have two weeks after RAC 1 to comment on things heard and discussed during the meeting. Email and contact information for comments is on the slide at the end of this presentation.

Priscilla: Table 7 in the WQMP outlines the deliverables.

**Jerry Linder, ACWA:** Many DMAs have submitted implementation plans; they never received comment on them and now being asked for new implementation plans. What is the process? Resubmit the same plan?

**Priscillia:** If there are some DMAs that have not received feedback on their plans, they can contact me. For DMAs that currently have a temperature plan, they may be able to move forward with that plan, but would still need to do a streamside evaluation to support that what they have in the plan makes sense in terms of shade gaps and analysis in their area.

**Mike Brown, BLM:** what is the process and timeline to work through some of the issues in public comment period for the Willamette Subbasins? Is this the right process to deal with issues?

**Michele:** DEQ is still accepting comments for the Willamette Subbasins temperature TMDL replacement until tomorrow. Response to comments for that TMDL will be provided to the Environmental Quality Commission and will be online in late June for the EQC meeting for adoption in July 2024. You are welcome to contact DEQ about the issues in the Willamette Mainstem and Major Tributaries TMDL now because of the public meetings laws allows us to communicate with you about issues with this current TMDL that we are talking about today.

Michele asked folks to review items in the chat. Noted that there was a chat from Lane County – concern that the 18-months for the implementation plans is not enough and three years would be better.

In the chat, is the shade assessment gap analysis in the TMDL?

**Ryan:** The shade assessment is not currently ready for the Willamette Mainstem TMDL and will be provided at the next RAC. For the Mainstem, the numeric results are available in the RAC materials, but more will be ready at the next RAC. The Willamette Subbasins TMDL shade assessment is currently online on the rulemaking website.

**Jerry:** Shade Gap analysis; what calculations went into considering on-the-ground constraints? Cost constrains? Are the practical constraints considered?

**Ryan:** The shade gap analysis is site-specific modeling and includes digitization of stream side areas, geomorphic and vegetation specific features put into the model. Shade targets – we have a document that describes how it was developed in detail. The model is compared to the assessment and site potential is called the Shade Gap. Table 9-3 in the TMDL provides the rolled-up results organized by DMA. DEQ can discuss that information if asked. In the technical support document, Appendix C also has information.

**Briana Weatherly, PGE:** Clarification on shade gap; if DEQ had completed a shade gap analysis for our area, we could choose to use that instead of our own streamside evaluation or do you have to do both?

**Priscillia:** The requirement is to use DEQ's unless you prefer to use your own.

**Briana:** How existing reservoirs are dealt with – about the zero load allocation – how did DEQ come to that and how is DEQ expecting dam operators to meet that?

**Jim:** Good questions. This is the same allocation we gave in 2006. It's challenging targets to meet because of the large impacts of dams downstream on temperatures.

**Ryan:** The allocations themselves are based on large part of what was in the 2006, which was zero. Practically, it means we are asking reservoir operators to not increase temperatures coming into the reservoir. If zero or something else, our perception is that the types of management strategies and operations needed to be implemented are similar (if .1 or .2). It's very difficult to track implementation of something like .1 – we felt it was appropriate that considering all the sources we consider in terms of the allocation framework, it was the consideration to go with what was in the original TMDL.

**Briana:** From a strict compliance standpoint – where it's not reality even though that is what is in the TMDL.

**Kristin Preston, City of Albany on behalf of League of Oregon Cities:** For entities that no longer discharge, their WLA will go back into the assimilative capacity is that Reserve Capacity? Is there some limit on how big Reserve Capacity is set to be?

**Jim:** We are not directly moving it into Reserve Capacity. We are setting the WLAs to accommodate the maximum current thermal load for sources, so the cumulative impact is less than if these large facilities are loading and it would allow us to increase the Reserve Capacity, but indirectly. We set the Reserve Capacity as high as possible after what remains from allocations in the system.

**Ryan:** We cannot exceed a temperature increase for anthropogenic sources more than .3° for the entire system.

**Rebecca:** Because Oregon Dept. of Forestry is a DMA from private lands, am I correct that the entire Willamette would have to have a streamside assessment done in 18-months? Or whatever we can get done? It seems like a lot of area. Qualitative, GIS data or on-the-ground verification?

**Priscilla:** Streamside evaluation – there is a quantitative and some qualitative when we ask for constraints. You may identify areas with more constraints that are lower priority – “not reasonable to focus on that area at this time”. DEQ wants to hear back from folks in more specific terms about what would be a more reasonable timeline to complete these analyses. The draft WQMP says 18-months, but DEQ is open about feedback. The intent is that for the entire area where you have jurisdiction, to prioritize and provide conclusions that are based on information about each area and why there are focus areas that have more priority.

#### **Additional comments in chat:**

In chat: Travis Williams, Willamette Riverkeeper: Western Pearlshell Mussels, Western Ridged Mussel as well should likely be in there. Western Ridged are in the lower Long Tom. There is a massive Western Pearlshell bed just below the confluence on the side channel as well. Were these species characterized?

In chat: Kristin Preston - City of Albany/ League of Oregon Cities: Is the "Albany Paper Mill" that was called out downstream of the Albany WWTP the IP/Weyer that no longer exists but still shown to have a discharge/impact?

In chat: Travis Williams, Willamette Riverkeeper: When the Corps (USACE) ramps up the Long Tom's flow in September in order to meet mainstream flow targets, it suddenly becomes a turbid mess. I know this is not the issue we are talking about, but it can be seen all the way down to Corvallis for perspective.

In chat: Mauria Pappagallo, Lane County PW: I echo the concern about 18 months. It takes planning time to budget for analysis needs, on top of the time it takes to do the analysis. I would suggest 3 years to do this analysis. Especially on top of meeting all of the other water quality related requirements.

Break: Five minutes

**Michele:** Discussed the draft rule and the draft fiscal impact statement. Michele noted, again, that the goal is to combine the Willamette Subbasins TMDL and the Willamette Mainstem and Major Tributaries TMDL into one rule language (these rules are adopted by reference).

**Oliva Jasper, ODA:** For each DMA, for the percent shade in that area needed and shade gap (to attain) but for ODA, ODF, there is not a shade analysis conducted for their areas, so ODA is doing their own shade analysis and writing their own goal?

**Priscilla:** There are portions of ODA's jurisdictional area that have a shade gap analysis that is available, the shade gap analysis that ODA is responsible for doing is where there is no DEQ analysis provided. The WQMP has several ways about going about doing the analysis. It would just be for the areas where we did not provide a gap analysis.

**Olivia:** In those areas where we do our own analysis, we use DEQ's shade curve, we set our own target?

**Priscillia:** Part of the process is for you to submit your methodology to DEQ, and we can look at that with you about how you will do the analysis.

**Jerry:** DEQ did some shade gap analyses, DMAs can do their own, what about being a small jurisdiction and DEQ has not done an analysis for my area, I don't have money to do my own – can DEQ do it for that small jurisdiction?

**Priscillia:** Unless you are ODA, BLM, ODF – if you are any other DMA and if you do not have a shade gap analysis available to you, you are not asked to complete a shade gap analysis. We are relying on the other streamside elements to guide your work.

**Ryan:** For the folks that do have a choice or want to do a shade gap analysis, for the Willamette Mainstem project area (today's topic) there are shade gap analyses except for the portion downstream by Willamette Falls by Clackamas River.

**Michele:** Reviewed the required Fiscal Impact Statement that was provided in the meeting materials. Michele presented all the parts of the statement including Environmental Justice and Racial Equality statements as required in the Administrative Procedures Act. Michele asked the RAC members to comment on an impacts to small businesses, Environmental Justice or Racial Equity.

**Jerry:** Some additional time to provide additional information – in terms of impacts it's difficult to know if a jurisdiction can't meet temperature requirements and if they must build a cooling tower for \$100 million dollars, that will mean significant rate increases on small business and other rate payers. If there is a 120 ft. of stream that cattle can get on or can't be farmed, it's a significant impact.

**Michele:** Not seeing any other hands raised for comments – covered the next steps (slide 56) and will take comments/questions from non-committee members.

**Zachary Peterson, Lane County:** Verify that DEQ did use a desktop analysis to conduct the shade gap analysis.

**Ryan:** Yes. Reviewed ariel photos, digitized into GIS, land covered conditions and Heat Source to model the shade conditions at both the assessed conditions and site potential restored vegetation conditions.

**Zachary:** Do you see a way that DMAs could use a desktop analysis method for streamside evaluation?

**Ryan:** Yes. We do believe that remote sensing like LiDAR or aerial photos can be used for an assessment including using GIS and evaluation within your jurisdiction to characterize the vegetation conditions as well as the models we use if you want to use them for your consideration.

**Zachary:** Would DEQ be willing to develop a tool that DMAs can use that would bring the data and methods together?

**Ryan:** DEQ is open to discussing that.

**Raj Kapur, West Yost Associates:** Long-Tom River cool water species – a different criteria for a portion of the time; a similar proposal was presented for Rickreall Creek for the Willamette Subbasins – does that have to go through a different standards development process or is this TMDL process adequate; thinking about what happened with the 2006 TMDL and the natural conditions criteria. Curious about what the process is like when a different use of temperature is identified.

**Ryan:** The TMDL process is not a standards process. The TMDL is implementing the narrative standard already in rule, the Cool Water Species Narrative. It's simply implementation of the existing rule. The results

will go into the TMDL rule – but it's not considered a new standard. One key difference between the 2006 TMDL and this current draft TMDL is that at the time of the 2006 TMDL, EPA had not yet approved the Cool Water Species Standard that was submitted as part of the Standards package, therefore there was no standard in place at the time of the 2006 TMDL. There was some uncertainty about what the numeric value should have been at that time, but since then, EPA has taken action, and that is what is in this current draft TMDL.

**Jenny Wu, EPA:** Appreciation for DEQ having these meetings and working closely with DEQ on these court ordered TMDLs.

Michele closed the meeting with final comments from DEQ Water Quality manager, Steve Mrazik.

Meeting adjourned at 3:24 p.m.

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