

# Upper Yaquina Watershed TMDLs

## Summary

### Rule Advisory Committee Meeting #1

Aug. 25, 2022, 9 a.m. to 12 p.m.  
Zoom meeting



State of Oregon  
Department of  
Environmental  
Quality

#### List of RAC member attendees

Name	Affiliation
Joe Steere	Small Woodlands Association/Lincoln County Farm Bureau
Roy Kinion	Lincoln County
Rebecca McCoun	Oregon Department of Forestry
Mike Kennedy	Confederated Tribes of Siletz Indians
Mark River	Weyerhaeuser
Cheryl Hummon	Oregon Department of Agriculture
Russ Glascock	Local landowner
Daniel Redick	Benton County
Alan Fujishin	Lincoln Soil Water Conservation District
Paul Engelmeyer	Wetlands Conservancy
Evan Hayduk	Mid Coast Watersheds Council
Glen Spain	Pacific Coast Federation of Fishermen's Associations

\* Matt Koon, Genesee & Wyoming Inc (railroad) and Randy Hereford, Starker Forests did not attend

#### List of DEQ team attendees

Name	Role
David Waltz	Mid Coast Basin Coordinator
Alex Liverman	Watershed Management Program Analyst
Dan Sobota	Water Quality Analyst
Harry Esteve	Communications Manager
Jennifer Flynt	Communications back-up
Michele Martin	Rulemaking process support

#### List of handouts

- [Draft agenda](#)
- [Charter](#)
- [Draft Fiscal Impact Statement](#)

#### Watershed Management

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## Agenda

Time	Topic
9 a.m.	Welcome, zoom logistics, introductions, agenda review
9:15 a.m.	Upper Yaquina Watershed TMDLs process overview
9:20 a.m.	Charter review and affirmation
9:40 a.m.	TMDL basics and Upper Yaquina bacteria and dissolved oxygen analyses overview
10:05 a.m.	Break
10:20 a.m.	Upper Yaquina bacteria and dissolved oxygen source assessment, allocations and management strategies
11:05 a.m.	Break
11:15 a.m.	Draft fiscal impact statement overview and discussion for input
11:50 a.m.	Next steps, wrap up
12 p.m.	Adjourn meeting

## Meeting Summary

DEQ presented slides during the entirety of the meeting. The information presented in the slides is not repeated in this summary. Rather, the slides are posted as a pdf on the Upper Yaquina TMDL Rulemaking webpage as a companion to this summary of comments and discussion by the Rule Advisory Committee members.

DEQ asked RAC members to change how their names appear in Zoom to include the initials AC ahead of their names to indicate RAC membership.

Following introductions of DEQ staff and RAC members, Alex Liverman presented the Upper Yaquina TMDL process timeline. Cheryl Hummon asked if there was a specific date for the Environmental Quality Commission briefing. Alex clarified that DEQ is constrained by the every-other-month frequency of EQC meetings and date shifts, but DEQ is targeting the Nov. 2022 meeting.

Alex reviewed the RAC charter. Glen Spain requested that RAC member contact information be circulated amongst the RAC members and alternates. Alex reminded RAC members to avoid communicating in numbers that would represent a quorum of the committee, as this would be considered a meeting which requires a two-week public notice in compliance with Oregon public meetings law. Glen clarified he was referring to one-to-one discussions. Daniel Redick (Benton County) clarified that he is acting as an alternate for Greg Verret, so his contact information should be included in the member list.

Alan Fujishin asked whether the RAC is just reviewing the fiscal and economic impact or the broader scope of topics listed in the policy objectives in the RAC charter. He wanted to confirm whether the extent of input expected from the RAC was limited to the fiscal impact statement rather than reworking any technical information that was already contributed to by the previous local stakeholder advisory committee and technical work groups. Alex confirmed that intent is limited to the fiscal impact statement and seeking information from the committee to fulfil that objective and that opportunity to comment on the extensive TMDLs documentation will be provided during the public comment period and hearing. Alan expressed relief.

Alan also asked for the formal definition of small business we'll be using. Alex clarified that it is in the statutes/rules and means businesses registered with the state and with less than 50 employees.

Following the charter discussion, Alex asked the RAC members to indicate affirmation of the charter (via head nods, verbal assent, thumbs up icons and in the chat). There was no indication of disagreement with the RAC charter.

David Waltz presented on TMDL basics and stated that technical questions by RAC members would be answered today or would be followed up on with additional information, as needed.

Paul Engelmeyer asked for clarification and an example on how reserve capacity is applied in TMDLs. David explained that reserve capacity is generally related to point source discharges when population growth occurs and that reserving some loading capacity for this purpose results in lower allocations for nonpoint or background sources. However, for the Upper Yaquina TMDLs no reserve capacity is proposed to set aside. Alan asked if reserve capacity could be used in relation to scenarios of lower future flows. Alex confirmed that this discussion wasn't relevant for the Upper Yaquina TMDLs and requested moving forward with the information to be presented.

David continued presenting the slides on the technical aspects of assessing sources, determining pollutant loading, distributing allocations for both bacteria and dissolved oxygen impairments in the watershed. He noted that there is no reserve capacity allocated.

Cheryl requested clarification on the bacteria allocations slide as to whether the percentages shown in the table (90%) were intended to be required reductions of bacteria. David clarified that an 83% reduction of bacteria was identified as the TMDLs target throughout the watershed and that the percentages shown in the allocations table corresponded to the allowable percentage of the loading capacity that each source sector could contribute, recognizing that nonpoint and background sources are combined, along with a 10% margin of safety.

**BREAK**

David continued the DEQ presentation with the dissolved oxygen assessment results, TMDL analysis approach, along with primary modeling outputs and load allocations.

Mark River requested clarification on Slide 33, the listing maps, as to the subwatershed delineation by light pink lines. David confirmed these are the 12-digit HUC subwatersheds.

For the dissolved oxygen analyses, David showed the results for the percent reductions for solar radiation and total phosphorus and showed results for effective shade as a surrogate measure. He compared current conditions and the overall target for site potential vegetation.

Russ Glascock asked what years dissolved oxygen data was collected. David confirmed that the most recent data in the analysis was from July and October 2016, though DEQ also collected dissolved oxygen data in May and November 2008 that confirmed the 303d listing.

A public attendee indicated they had a question. David requested it be typed into the chat for consideration if there is time after RAC member questions and discussions. (Note: that question was forwarded to a DEQ Analyst, and our response will be shared with the RAC).

Mark requested the name of the watershed from which sediment values were used in the modeling, in response to David's statement that sediment values were not determined for the Upper Yaquina Watershed.

David clarified that the Willamette Basin sediment calibration was used in the model and is documented in the technical support document. *(DEQ Note: The HSPF model document that contains this information was distributed to the RAC via email on Aug. 31)*

Rebecca McCoun requested clarification on the what the values in the effective shade surrogate measure allocation tables represent. David clarified that the table results contain effective shade (percent of incoming solar radiation blocked by vegetation) at 90% canopy density (as labeled at the top) over the varying stream widths and three stream orientation columns.

Paul pointed out the focus of the effective shade discussion was on the mainstem and asked whether the site potential effective shade curves apply to tributaries, including non-fish bearing Type N streams and tributaries that come through a “no-buffer ag component,” or how shade on these streams dealt with? David responded that the effective shade curves apply to all perennial streams in the watershed other than the mainstem Yaquina River, which was modeled for shade. Also, the shade curves do not include site-specific topographic shade, so site-specific assessment is needed to determine what portion of effective shade is provided by topography for specific locations. David explained that the purpose of the effective shade allocations for tributaries to the Yaquina River and Little Elk Creek are to ensure excess solar radiation is not reaching the stream surface and contributing to dissolved oxygen impairments locally or in downstream waters. David also stated that DEQ uses a different stream classification system than ODF and DEQ can provide additional information on this through the RAC process. In summary, shade curves are applicable to reduce solar radiation watershed-wide.

Mark asked what data layer was used for the perennial streams. David indicated DEQ used analyst corrected most current (at the time) high resolution NHD layer. This information is provided in the TMDL Technical Support Document and David can provide this information after the meeting. *DEQ Note: Watershed and stream delineation was performed for the HSPF model using the NHDPlusV2 dataset and for water quality assessment using the most current versions of the High Resolution National Hydrography framework, which is the national and state hydrologic standard. DEQ distributed the HSPF model report to the RAC members on Aug. 31.*

Alex stated that DEQ would respond to non-RAC member questions in the chat following the meeting.

Alex asked whether a break was needed and the group indicated a preference to push on.

David continued presenting on the management strategies identified to implement allocations for both bacteria and dissolved oxygen impairments in the watershed.

Alan asked if the bacteria analysis evaluated total coliform data in addition to E. coli data. David clarified that since the early 2000s DEQ only collects E. coli data in freshwater as the indicator bacteria for fecal contamination.

Cheryl asked if the Water Quality Management Plan included timelines for achieving the load allocations. David confirmed that timelines are included, which required multiple assumptions in order to generate reasonable general projections of timelines and milestones. David added that DEQ concluded that bacteria and phosphorus can be addressed more quickly than shade.

Following a break, Alex presented an overview of the draft fiscal impact statement, how DEQ approach the analysis and rested on a slide with specific input requests on it from the RAC. Alex requested discussion from the RAC today, as well as conferring with RAC members’ constituents and subsequent submittal of studies, documentation or other written information to help inform DEQ’s fiscal impact statement.

Paul asked whether the fiscal and economic analysis will quantify costs as well as acknowledge the benefits (both Glen and Alan later expressed agreement with including an assessment of benefits). Alex pointed to the inclusion of costs of ongoing impairment as a consideration in the draft fiscal impact statement and noted DEQ's lack of available information to make that more specific in the analysis.

Glen highlighted the need to consider in the cost benefits of watershed restoration both the positive and negative effects of implementation and lack of implementation. Glen noted the generally high societal costs of mitigating externalized pollution; that economic benefits of restoration are rarely discussed, some of which can be monetized; significant investments already made in restoration efforts; and costs of treatment for water facilities downstream. Glen also requested that the Water Quality Management Plan identify specific funding for landowners to reduce the "frictional costs" of transitioning from current conditions to desired conditions by adding specific measures and practices and help fund those projects.

Alex requested submittal of any available studies or other documentation on monetizing benefits and quantifying restoration investments specific to the watershed.

Joe Steere discussed several examples of quick estimates of landowner/operator losses that should be considered in accommodating the needed management strategies:

- 120-foot vegetated buffers along streams equates to foregoing up to 40,000 board feet of timber or about \$1,000 per year per acre, noting that this could be required under the forest practice rule amendments currently underway;
- Vegetating pastures along streams equates to foregoing some number of cow/calf pairs or about \$1,000 per year per 5 acres;
- Vegetating pastures along streams equates to foregoing hay production of about 2 tons/acre or about \$300 per acre

Joe acknowledged that the recent private forest accord is the primary driver for changes in riparian buffers related to commercial timber harvest.

Alex requested submittal of documentation of these costs, specific to locations in the watershed.

Joe also asked if there was data available as to pounds per day of phosphate from cattle. Alex noted that phosphorus contributions from livestock manure in the watershed is anticipated to be highly variable due to locations, frequency, volume and timing of livestock access to streams, which DEQ doesn't have information about. David indicated that National Resource Conservation Service has default values for nutrients in manure, and values are included in the TMDL Technical Support Document.

Russ suggested the Farm Service Agency as a resource for information on 176 acres of small farmlands in current CREP contracts (\$16,000 worth). He suggested obtaining information from the Mid Coast Watershed Council and Lincoln County Soil Water Conservation District on conservation projects. Alex requested submittal of specific contacts and studies to request. Russ planted 90 acres in 2000 that are 50 to 60 feet tall starting to shade the river.

Daniel offered that Benton County has information on cost analysis for county staff and resources to for TMDL implementation planning and reporting. Alex requested submittal of the cost analysis.

Alan reiterated cost versus restoration investments in the long term and figuring out how to better characterize that for fiscal impact. Need cost estimates to scale the investment for society and basin. Concerned about the definition of small business (under statute) may not be capturing large businesses or lessors and lessees relationships and investment property use. Alan recommends capturing total cost estimate for watershed (e.g., update the Willamette riparian restoration), regardless of funding sources and how those sources help mitigate costs to landowners. Alan intends to think about it further and submit some written input.

Alex reiterated that DEQ believes it is meeting the fundamental requirement of the rule, which are not different than issuing a TMDL by rule.

Evan Hayduk provided input on additional management strategies to address excess solar radiation. Along with riparian vegetation shade, Evan noted that large wood placement can be used to help capture gravel and build a gravel lens over incised channels and/or bedrock stream bottoms. This creates salmon habitat, but also directs flow through areas not receiving direct sun. Evan also recommends beaver activity in upper watershed with the associated benefits of increased summer flow. Alex requested this input and applicable documentation be provided.

Rebecca questioned whether the Oregon Department of Forestry's draft buffer rules and small forest landowner rule changes currently underway may relieve some economic impacts from the TMDLs due to being required under ODF rules, depending on timing. If passed, would this rule affect the TMDL rule fiscal assessment? The small forest landowner program will address certain impacts with tax credits and grants and other programs for landowners under 5000 acres. Interested in timing of TMDL rule and how these two processes coincide.

Alex confirmed that the TMDL issuance projection is for Spring 2023, when those new ODF rules should be in place. Alex requested Rebecca provide any available analysis and documentation on this issue.

Cheryl discussed a similar situation from the Oregon Department of Agriculture perspective as to when ODA rules already require some of the conditions specified in TMDLs. Achieving TMDLs load allocations for agriculture may be similar to compliance with ODA's existing regulations (e.g., the waste rule). Therefore, the question is whether the TMDLs represent a new fiscal impact or an existing financial impact under existing rules. Alex requested Cheryl provide documentation or analysis as to potential neutral fiscal/economic impacts of the TMDLs.

Alan mentioned a recent ODA tax lot level analysis under ODA's Strategic Implementation Area in the watershed and wondered if that would have utility in informing ownership and the level of agriculture going on. Cheryl indicated that this analysis was done for a Strategic Implementation Area within the basin (two middle 12-digit HUCs) and that more coordination (between ODA and DEQ) will occur on how the SIA fits into TMDL implementation planning and subsequent TMDL implementation phase once the TMDL documentation is available.

Alex wrapped up the discussion by thanking everyone for the input today and reiterating the need for submitting specific references/documentation to inform the draft fiscal impact statement. DEQ asked for input by Sep. 12<sup>th</sup> and also reviewed the next steps in the TMDL process again for clarity.

Glen requested calendar dates for the next RAC meeting. Alex indicated that DEQ needs to evaluate the RAC input. Sometime in late October is most likely target for next meeting.

DEQ adjourned the meeting at 12:02 p.m.

## **Alternative formats**

DEQ can provide documents in an alternate format or in a language other than English upon request. Call DEQ at 800-452-4011 or email [deqinfo@deq.state.or.us](mailto:deqinfo@deq.state.or.us).