

Meeting Summary

Three Basin Rule Rulemaking 2025



Advisory Committee Meeting #1

March 31, 2025, virtual meeting (Zoom)

List of Attendees

Rule advisory committee representatives present:

Jason Pulley	City of Salem
Jeff Aprati	City of Sandy
Ron Wierenga	Oregon Association of Clean Water Agencies
Mary Logalbo	Clackamas River Basin Council
Kimberly Swan	Clackamas Water Providers
Jesse Main	Oregon Onsite Wastewater Association
Keri Morin Handaly	Confederated Tribes of Grand Ronde
Susan Fricke	Eugene Water and Electric Board
Dan Hurley	Lane County
Chris Einmo	Marion County
Mary Stites	Northwest Environmental Defense Center rep. Willamette Riverkeeper

Government advisors:

Rick Cowlshaw	Oregon Department of Agriculture
Becky Anthony	Oregon Department of Fish and Wildlife
Danielle Gonzalez	Oregon Water Resources Department
Shawn Stevenson	Oregon Health Authority
Michelle Maier	U.S. Environmental Protection Agency

Oregon Department of Environmental Quality staff:

Kaegan Scully-Engelmeyer, Connie Dou, Aron Borok, Mary Camarata, Trina Mayberry, Bradley Eagleson (observing)

Interested parties:

Elaina Turpin (CWP alternate), Nancy Toth (EWEB alternate), Brian Nicholas (Marion County alternate), Kelly Reis (ODFW alternate), Toni Whitler, David Kinney, Pamela Villarreal, Kelly Wood, Scott Forrester, Olivier Jamin, Amy Chinitz, Michelle Bilberry, Alvin Klausen, Peter Olsen, Tsigereda Woldegiorgis, Mark Strandberg, Steven Barnhardt, Tanya Haeri-McCarroll, Laura Conroy

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Materials available before the meeting

- Meeting 1 agenda (rulemaking web page)
- Rulemaking Advisory Committee Charter and Roster (rulemaking web page)
- Draft Rule Revisions

Agenda

1 p.m.	Introductions and Rulemaking Advisory Committee Charter (Kaegan Scully-Engelmeyer, facilitator) <ul style="list-style-type: none">• DEQ staff and RAC members introduce themselves.• Overview of RAC charter, function and meeting ground rules.
1:30 p.m.	Meeting Objectives and Project Background (Aron Borok, rulemaking lead) <ul style="list-style-type: none">• DEQ staff discuss project and meeting objectives.• DEQ staff provide context for the rulemaking project.
2:20 p.m.	Break (10 Mins)
2:30 p.m.	Draft Rule Language and Implementation Concepts (Aron Borok, rulemaking lead) <ul style="list-style-type: none">• DEQ staff review proposed rule revisions and provide opportunity for feedback from RAC members.
3:45 p.m.	Wrap Up & Next Steps (Aron Borok, rulemaking lead and Kaegan Scully-Engelmeyer, facilitator)
4 p.m.	Adjourn

Meeting Summary

I. Welcome, introductions, and Rulemaking Advisory Committee charter

- Jennifer Wigal welcomed the group, gave a brief introduction, and thanked the RAC members for their participation in the rulemaking.
- Kaegan Scully-Engelmeyer reviewed Zoom logistics and meeting agenda.
- DEQ staff and RAC members introduced themselves
- Kaegan Scully-Engelmeyer reviewed the RAC charter, including the committee purpose, ground rules, and schedule for upcoming meetings.

II. Background: Three Basin Rule history, recent developments, purpose of the rulemaking

Aron Borok gave a presentation about the rulemaking objectives and the background/context for the rulemaking including types of wastewater permits, the history of the Three Basin Rule, the *Mauui* decision and the concept of functional equivalency and an overview of Marion County's 2024 rulemaking petition.

Questions from RAC members:

1. Jesse Main asked whether the current Three Basin Rule restricted NPDES permits for industrial users and irrigation discharges. Aron Borok answered that NPDES permits are currently not allowed for industrial dischargers and that it would apply to the entire basin.
2. Mary Stites had a question about the groundwater transit study and whether chemical integrity during transit was also included in that analysis. Aron Borok answered that DEQ has some of that analysis, but does not yet have all of the results.

3. Mary Stites asked whether Marion County's petition included a scientific basis for the conflict with Maui. Mary Camarata answered that Marion County felt that it likely that the discharge would be functionally equivalent, so they would like an NPDES permit to be cautious. Chris Einmo clarified that the Wastewater Facility Planning Study included some of this analysis and subsequent analysis has been submitted to DEQ.
4. Ron Wierenga asked whether there is currently no discharge to surface water allowed or some allowance as long as it doesn't lower water quality. Aron Borok clarified that the rule says that no discharge to surface water is allowed and any ground discharge must meet groundwater protection requirements. DEQ may issue a variance for groundwater protection requirements so long as there is no measurable lowering of water quality.
5. Keri Morin Handaly asked about the projected time of travel for the infiltration basins if they have an NPDES permit. Aron Borok answered that the projected time of travel is around 18 months, and this is regardless of the type of permit and more based on the type of facility. Connie Dou clarified that before the Maui decision, DEQ's approach for a facility that does not have a direct outfall, DEQ would issue a WPCF, but since the Maui decision federal requirements require DEQ to issue an NPDES permit in cases of functional equivalency.
6. Keri Morin Handaly noted that the Maui decision said that there shouldn't be a discharge to shallow groundwater because it discharges to the stream, and that if the only way to discharge is subsurface and it makes its way to the stream the focus should be on figuring out how to make that water as clean as possible. Mary Camarata clarified that there may be multiple discharges that may need to be switched to NPDES permits. What is important is matching the permit to where the discharge is ending up.
7. Jesse Main asked about the length of travel time in the *Maui* decision. Connie Dou answered that the *Maui* decision the minimum transit time was 84 days and the average transit time was 14 to 16 months. Mary Stites indicated that the time of travel was not articulated in the opinion and that the injected water traveled a "half mile or so through groundwater" before reaching the ocean
8. Mary Logalbo clarified that in the current form no functional equivalent is feasible since it falls into a NPDES which is not allowed. DEQ staff confirmed that is a good summary of the situation. Keri Morin Handaly expressed concern that DEQ was moving forward with the rulemaking when there was no determination that Marion County's proposed discharge was a functional equivalent discharge. Mary Camarata answered that the groundwater modeling showed that its very close, and that in time it could be determined to be functionally equivalent and would likely need to be switched to a NPDES permit. (Clarification: DEQ's analysis, which had been conducted prior to the RAC meeting, had determined that the facility would require an NPDES permit.)
9. Mary Logalbo asked a follow up question about the proposed rule, and whether it is still an option that the rule could remain as it is currently. Aron Borok answered that DEQ is implementing the direction of the Environmental Quality Commission) to allow NPDES in limited circumstances. DEQ will bring the proposal to the commission.

Aron Borok finished his presentation about the context of the rulemaking

- Reviewed DEQ's three tiers of protection, and the status of Three Basin Rule waters as falling between Tier 2 and Tier 3.
- Tier 2.5 policies vary by states, Oregon does not have explicit Tier 2.5 protections.
- The tiers of protection provide a "Framework to maintain a minimum level of water quality protection and, where water quality exceeds that minimum level of protection, balance water quality protection with the opportunity for important community growth."

No RAC questions or comments noted.

III. Review of draft rule language and implementation concepts

Aron Borok presented on the proposed rule revisions

- Presented the problem statement that the *Maui* decision requires NPDES permit issuance for functional equivalent discharges, and the current Three Basin Rule prevents new NPDES permit issuance for domestic sewage treatment.

- Reviewed Environmental Quality Commission's direction to allow new NPDES permits for sewage treatment facility while continuing to ensure extra state protection above Tier 2.
- Provided an example to illustrate the concept of *de minimis* degradation for Tier 2 waters and how assimilative capacity is used in the equation.

Assimilative capacity questions:

1. Ron Wierenga asked if the concept of *de minimis* degradation was specific to all waters. He commented that this seems similar to what would be done for an antidegradation review but is different than how limits are set in NPDES permits otherwise, which are either technical or water quality based. Aron Borok answered that this concept is specific to surface waters. Groundwater protections have their own protections. Water quality-based effluent limits are based primarily on meeting water quality standards based on conservative assumptions of low flow and design capacity. As part of the permitting process, DEQ also evaluates whether the discharge will utilize more than 2.5% of assimilative capacity. If it will, DEQ would require socioeconomic review or increased treatment.
2. Rick Cowlshaw asked whether assimilative capacity was calculated based on modeling of the system. Aron Borok confirmed that assimilative capacity is calculated based on the mass balance of how much pollutant can be discharged to meet the water quality standard in the stream after the effluent mixes with the stream flow.
3. Jeff Aprati asked about the socioeconomic review, how it would work, and what the decision criteria would be. Aron Borok answered that the review is essentially the facility making the case that the benefits of the discharge outweigh the environmental costs of pollution. Oregon uses EPA's 1995 Interim Economic Guidance and Financial Capability Assessment Guidance for the socioeconomic review. Facility size determines whether DEQ or the Environmental Quality Commission make the final determination.
4. Mary Logalbo asked whether water quality criteria are looked at individually or cumulatively. Aron Borok answered that we look at each criterion individually based for pollutants of concern identified.
5. Keri Morin Handaly asked in the chat what model DEQ uses to evaluate use of assimilative capacity. For direct discharges, the impact of a facility on the assimilative capacity is determined by mass balance equation under low stream flow conditions. For an indirect discharge, DEQ would assume no mixing. RAC member Chris Einmo added that as part of the documents submitted during the petition included a contaminant fate and transport model that was included in written comments.

Aron Borok continued presenting on the proposed rule revisions

- Presented about other state's approaches to Tier 2.5 protection, which are broadly characterized as narrative and quantitative approaches.
 - Reviewed DEQ's proposed approach, which combines narrative and quantitative approaches to ensure no measurable lowering of water quality, ensures all groundwater protection requirements are met, and provides an opportunity for socioeconomic review.
 - Reviewed what is meant by demonstrating no measurable lowering of water quality, looking at each pollutant in discharge, and DEQ must agree with demonstration.
1. Ron Wierenga asked if the rule language applies to new or existing facilities. Aron Borok answered that there could be a case where the language would apply to a new treatment plant if the facility can demonstrate what they are proposing is going to be better for water quality.
 2. Chris Einmo clarified that the proposed facility in Mill City is technically a new facility with a sequencing batch reactor system that is replacing an existing facility, which is essentially a large septic system. The permit is new, because it is a new facility, but the source of that wastewater is still the city of Mill City. Ron Wierenga noted that comparing existing treatment might be different under different scenarios, and future/other situations should be considered.
 3. Mary Stites asked Marion County if a transfer of the existing permit had been considered. Chris Einmo responded that the initial study was conducted some years ago when they were directed to follow a WPCF permit route, before the *Maui* decision. They were confined by the geology of the region, so there was not a feasible way to get the discharge into the groundwater far away from the

river. Marion County looked at multiple sites and every site had high potential of being functionally equivalent, which would need an NPDES permit.

Aron Borok continued presenting on the proposed rule revisions

- Presented a comparison between Tier 2 protections and protections under the proposed Three Basin Rule revisions

	Tier 2	Three Basin Rule
Per discharge	2.5% of assimilative capacity	1% of assimilative capacity
Cumulative	10% of assimilative capacity	2.5% of assimilative capacity

- Reviewed *de minimis* degradation for Tier 2 analysis and described provisions if impacts to water quality are expected above the *de minimis* degradation the applicant would be required to develop a socioeconomic review.
- Reviewed the groundwater protection requirements under the proposed rule.
- Reviewed socioeconomic review provision that would allow applicants to demonstrate social and economic benefits outweigh possible environmental impacts in cases when lowering of water quality is more than allowed 1% use of assimilative capacity.
- Reviewed the rationale for the proposed approach, which included the following:
 - Keep the extra protection.
 - Greater protection than Tier 2.
 - Create a pathway to replace old onsite or treatment systems with updated facility.
 - Permitting is a transparent process with opportunity for public comment.

RAC member questions:

1. Mary Logalbo asked how the socioeconomic analysis process accounts for negative and positive economic impacts. Aron Borok responded that he would share EPA's guidance and would try to find an example in Oregon for the next meeting.
2. Mary Stites asked about how impacts to downstream communities that might have to increase drinking water treatment might fit into the socioeconomic analysis. Aron Borok responded that DEQ follows EPA guidance and that looking at impacts to downstream users would be something we DEQ consider.

Discussion:

1. Ron Wierenga commented that the request from Marion County was specific and very narrow and didn't have direct discharge. He expressed concern that the way the proposed rule is written is more open beyond that specific scenario and would allow for a direct discharge. Chris Einmo responded that the proposal Marion County submitted included only groundwater discharge. The petition also included a minimum distance because they wanted it to be applicable to other systems and preserve the intent of the Three Basin Rule.
2. Jesse Main expressed support of upgrading treatment systems in these communities and asked if technology is available for these other treatment systems that would help meet these standards. What are the safeguards are we going to have in place to make sure facilities are keeping their systems up to date. Borok agreed that weighing updates to older systems and understanding improvements to treatment systems over time is an important part of this process.
3. Aron Borok clarified that the way the proposed rule is currently written it does allow for direct discharges. He noted that there may be scenarios under which direct discharge may be a better option.
4. Jason Pulley commented about several things:
 - a. The City of Salem does not support allowing a direct surface water discharge. NPDES permits generally have permitted overflows, something that was addressed in Marion County's petition, that needs to be included in the rule.
 - b. He requested clarification on how the assimilative capacity calculation is done for a groundwater discharge. He expressed concern about unknowns associated with the measurement.
 - c. He noted that a minimum distance requirement was an important part of Marion County's petition that he would like to see put in the rule.

Aron Borok responded about the assimilative capacity, how models would be used to estimate assimilative capacity, working with permitting to develop an example and will try to have an example for the next meeting.

5. Keri Handaly asked about how the rule be implemented, monitoring requirements, modeling frequency given new chemicals and population changes over time. Aron Borok responded that some of the implementation we'll have to go into more detail next meeting. He noted that calculations are based on the design capacity of the system and worst case scenarios. For groundwater, DEQ would calculate use of assimilative capacity at the groundwater/surface water interface, which provide another buffer level. Keri Handaly asked a follow up about monitoring frequency for groundwater. Mary Camarata answered that there will be monitoring wells of the infiltration basins and near the river, and monitoring will be required quarterly or semiannually, and will have contingency in place if there are increases in pollutant levels over time.
- Ron Wierenga commented that under the *Maui* decision, functional equivalent are similar to a direct discharge and need to be permitted as such. He advised DEQ to consider adding something to the rule that is saying "If you have determined that you have a functional equivalent of a direct discharge then you can get an NPDES permit, and you follow DEQ's process for getting that permit." Such language would allow for a NPDES permit under limited circumstances. It seems that the more the rule contains for how it is going to get done, the more there is for interpretation and other circumstances beyond what was intended. The rule has specific requirements about increasing mass loads to surface waters that and the way the proposed rule is written now you could read into that ask for a mass load increase based on *de minimis*, which is not currently allowed. Mary Camarata clarified that groundwater protection requirements allow no change in background concentration, that an indirect discharge would have some assimilation and is not the same as a direct discharge. Ron Wierenga asked which rules will apply, groundwater or surface water. Aron Borok answered that the discharge would have to meet both Groundwater Protection and NPDES requirements.
6. Jesse Main commented that if it is determined to be functionally equivalent, why not go to a direct discharge where we could more effectively monitor the effluent, reaction time would be improved. Mary Camarata responded that DEQ is trying to cover both pathways, an indirect and direct discharge scenarios.
7. Chris Einmo commented that they were designing a system that would meet the direct surface water discharge requirements at the end of pipe and the groundwater infiltration would provide an extra level of protection. Monitoring would be done at the end of the pipe going into the basin as well as monitoring in the groundwater.
8. Mary Stites suggested that allowing a WPCF and then later needing an NPDES permit would be at odds with the language of Clean Water Act because the act prohibits addition of pollutants without an NPDES permit. To the extent possible, avoid that temporal dynamic. She also asked what the pollutant loading would be allowed by the NPDES permit for Marion County's facility. Mary Camarata responded that we don't have a permit application yet, we're having preliminary conversations with the Marion County. Chris Einmo said they have proposed BOD, TSS, Nitrate limits to DEQ.
9. Keri Morin Handaly commented that currently there are not enough protections and monitoring in direct discharge NPDES permits for aquatic organisms.
10. Mary Stites commented that there is a timing mismatch issue in terms of illustrating the timing of revisiting the Three Basin Rule before a functional equivalent has been determined in the basin. She stated that conservation groups think that communities should be able to rebuild after fires but rebuild in a way that preserves ecosystem services, and cutting away the Three Basin Rule is not in accordance with those priorities.
11. Mary Logalbo commented about their interest in more information about how the percentages in the proposed rule were decided, and if is still an option to look at other approaches. Aron Borok provided examples of other state approaches that were considered, and the 1% was chosen as a simple approach that was consistent with the way things are currently done, but more protective.
12. Chris Einmo added for the record that "Mary gave a clarification in the chat that DEQ determined based on the groundwater modeling that this proposed discharge was likely functionally equivalent to the groundwater model". Also echoed concerns about the temporal aspect, that if it's determined to be functionally equivalent then you always needed that permit, so best and required to get it upfront.

IV. Wrap up and next steps

Kaegan Scully-Engelmeyer noted that DEQ will send a meeting summary and provide RAC members the opportunity to review the summary before it is posted to the rulemaking webpage along with the presentations. For the next meeting we will plan to follow up on four items identified during the meeting:

1. Socioeconomic review- provide an example to the RAC.
2. An illustration to show how assimilative capacity is estimated.
3. More details about the implementation process and examples of how modeling or calculations would be done.

Meeting was adjourned.

V. Meeting Chat

Several resources posted or referenced in the chat during the meeting are available below:

[Three Basin Rule Rulemaking page](#)

[Three Basin Rule RAC Charter](#) (download link)

[DEQ Internal Management Directive for Functionally Equivalent Discharges: Determining if a WPCF permit should be a NPDES permit under the Maui Supreme Court Decision](#)

*Mid-Willamette Valley Council of Governments in 2021 socio economic analysis (link not provided)

*[2019 EcoNorthwest Report: Economic Importance of Water in the North Santiam](#)

(Clarification: socio-economic reports posted in the chat are not socio-economic analyses prepared during antidegradation reviews in DEQ's permitting process.)

VI. Feedback Provided Following the Meeting

DEQ received correspondence from two RAC members following the meeting related to the meeting content. The text of these emails is below.

A. E-mail from Mary Logalbo, Clackamas, received March 31, 2025

Aron,

Thank you for your presentations and discussion at the first Three Basin Rule RAC. My feedback is as follows:

- There is still a need for the 3-Basin Rule to provide added protections to the Clackamas River, which provides drinking water to over 300,000 Oregonians, and is home to threatened and endangered species, including the last significant wild late winter coho run in the Columbia Basin as well as the other rivers it protects.
- I am concerned that the proposed amendments do lessen the current protections of the 3-Basin Rule, and set a precedent for further amendments.
- I support the section of the amendment that allows for the issuing of permits with no degradation that provide a pathway for improving existing facilities.
- I would love to see an alternative approach to the Assimilative Capacity allowances that is more narrow, specific and stringent that better ensures no net reductions in water quality are realized.

- I need to learn more about the social and economic development criteria and how its used, but I'd want to be sure the economic and social impacts of a polluting facility on a watershed are also equally taken into account alongside the benefits any one facility might provide.

Thank you,
Mary

B. E-mail from Jason Pulley, City of Salem, received April 25, 2025

Hi Aron,

On behalf of the water providers within the jurisdiction of the Three Basin Rule, I am submitting the attached comments on the first draft of the proposed rule. Please include these comments in the public record as well as to other RAC members.

Feel free to reach out if you have any questions. Thanks.

Jason

(text of attached comments below)

Three Basin Rule – Water Providers Rule Update Comments

- Please explain why DEQ's proposed rule language deviates significantly from what was proposed by Marion Co. Did DEQ have concerns over the provisions presented in the petition, and if so, what were they?
- The petition and rule change were intended to resolve the conflict between existing language and the *Maui* decision. The sole purpose of the change should be to define when a ground water discharge is allowed to be permitted as an NPDES permit rather than a WPCF. In that regard, it is imperative the new rule give direction on the determination of functionally equivalent discharges that can be permitted under NPDES.
- The Three Basin Rule has protected the Clackamas, North Santiam and McKenzie rivers for nearly 40 years. It has accomplished this by not allowing direct discharge to the rivers and requiring review and special conditions on WPCF permits issued in the basins. It is not the intent of the petitioner nor any of other the stakeholders in the basins to weaken those protections by allowing direct surface water discharges. Resolving the conflict between *Maui* and the Three Basin Rule does not and should not require allowing direct surface water discharge.
- There is some concern in the use of assimilative capacity ("AC") for regulating indirect discharge to surface water through diffuse groundwater discharge. AC is typically used for direct discharge to surface water by measuring the effluent concentrations along with the receiving water. Trying to regulate diffuse discharge through the ground system would be impractical and difficult to enforce unless concentrations are measured at "end of pipe" before the effluent reaches the ground system. However, the end of pipe compliance point would not account for the additional treatment benefits of a ground discharge.
- It is critical to water users that facilities receiving NPDES permits within the jurisdiction of the Three Basin Rule not be allowed any permitted emergency overflows to surface water bodies. In keeping with the spirit of no direct discharges, bypass, upset, or overflow of collection and/or treatment systems should be self-contained and disposed of in a manner that will not cause degradation of the surface water system.