



Groundwater Allocation Rules Advisory Committee Hybrid Meeting #3 (8:30 am – noon, May 31, 2023) Meeting Summary

This is a summary of the Groundwater Allocation Advisory Committee (RAC) Meeting held in person (Salem office, Oregon Water Resources Department) and virtually (Zoom platform), on May 31, 2023, from approximately 8:30 to Noon. For more information, see the Meeting Agenda, Meeting Presentation, Draft Rules, and other Meeting Materials, available online at <https://www.oregon.gov/owrd/programs/GWWL/GW/Pages/Groundwater-Rulemaking.aspx>

Rules Advisory Committee (RAC) members in attendance:

Adam Sussman, Central Oregon Cities Organization (COCO), GSI Water Solutions (online)
April Snell, Oregon Water Resources Congress (online)
Casey McClellan, Seven Hills Winery (online)
Dave Wildman, Anderson Perry & Associates (online)
Gen Hubert, Deschutes River Conservancy (online)
Greg Kupillas, Pacific Hydro-Geology, Inc.
Jeff Stone, Oregon Association of Nurseries
Karen Lewotsky, Oregon Environmental Council
Kelly Warren, Confederated Tribes of the Umatilla Indian Reservation (online)
Laura Masterson, 47th Ave Farms (online)
Lauren Poor, Oregon Farm Bureau
Kimberley Priestley (proxy), WaterWatch of Oregon
Margaret Durner, Citizen At Large (online)
Misty Buckley, Homeowner, Klamath County (online)
Nick Siler, Atmospheric Science, OSU (online)
Obie Strickler, Grown Rogue (online)
Phil Brown, Northwest Groundwater Services (online)
Robyn Cook, GSI Water Solutions (online)
Sarah Liljefelt, Oregon Cattlemen's Association (online)
Scott White, Klamath Drainage District (online)
Tammy Wood, Oregon Lakes Association
Zach Freed, The Nature Conservancy



RAC members not in attendance:

Bill Jaeger, Applied Economics, OSU
Brad Parrish, Klamath Tribes
Cheyenne Holliday, Verde
Derrick DeGroot, Klamath County Commission/AOC
Kelly Simmelink, Jefferson County Commission
Michael Martin, League of Oregon Cities
Susan Lea Smith, Willamette University Law School
Tyler Hufford, Rancher

Others in attendance:

Oregon Water Resources Department (OWRD) staff: Annette Liebe, Justin Iverson, Laura Hartt, Kelly Meinz, Ryan Andrews, Travis Brown, Ben Scandella, Jeana Eastman, Ivan Gall, Darrick Boschmann, Tim Seymour, Amanda Mather, Andrew Wentworth, Jen Woody, and Emelie McKain.

Oregon Water Resources Commission: Meg Reeves, chair (online).

Members of the public: Glenn Barrett (Water for Life), Cole Hendrickson (Oregon Department of Environmental Quality), John Short (Water Right Services), Maitreyee Sinha (Washington County), Nolan Smith (Carollo Law Group), and Ken Yates (Oregon Water Resources Congress)

Welcome & Agenda

OWRD staff welcomed participants, led an “icebreaker” concerning favorite Oregon water bodies, and reviewed the agenda.

Timeline – Update

Staff recommended adding a 5th and 6th RAC meeting, thereby shifting the rulemaking timeline. Proposed dates for the additional meetings are August 2nd and September 13th. Given that adjustment, the earliest a notice of proposed rulemaking could be published would be November 1. After a suitable public comment period, the earliest the Water Resources Commission could adopt rule changes would be early 2024.

Some RAC members expressed concern over having the public comment period span the winter holiday season. One RAC member noted that if the 6th meeting was not needed that it may be possible to wrap up the public comment period before the holidays. OWRD staff responded that they would reevaluate the timeline and adjust as appropriate.



RAC Meeting #2 Recap - Meeting Summary

Staff reviewed the meeting summary from RAC #2 and invited feedback. A RAC member asked to modify the summary to reflect his intended comments. Staff invited other RAC members to submit similar requested corrections in writing.

Surface Water Availability Determination

OWRD staff presented an overview of the Surface Water Availability Reporting System (WARS) and answered questions from the RAC as follows:

- Some RAC members asked for clarification about whether and why 50% exceedance is used for issuing new instream water rights (ISWRs) and storage rights; OWRD staff agreed to follow up.
- A RAC member asked for clarification about how storage and instream demands are calculated, and how those definitions would apply in a closed basin. OWRD staff responded that storage demands are calculated based on storage water rights; in a closed basin, a terminal lake would only be included in the storage demand calculation if it had an associated storage water right. The instream demands are calculated based on the full rate listed on the instream water right. The instream water right rate is the amount requested by ODFW or one of the other applicable agencies or the 50% exceedance natural stream flow, whichever is lower.
- Other RAC members asked for clarification about the meaning and estimation of natural streamflows and expressed concern about the relevance of those streamflows outside of the context of WARS. OWRD responded that natural streamflow in WARS is representative of a specific period of time and that the calculated natural streamflow may change if the reference period changes. Natural streamflow is intended to represent an expected condition from which to debit expected demands to calculate water availability, and so is appropriate in this context.
- Another RAC member asked what circumstances lead to reserved flows in WARS, and staff and another RAC member explained that they support multipurpose storage projects and are set following a process defined in statute.
- Another RAC member asked for clarification whether the Department really means that 80% of the water use is for irrigation or whether the 80% number represents the amount of water rights issued to agriculture. Staff said they would confirm that the 80% number refers to water use.
- RAC members asked for clarification about updating WARS to fill in data gaps, suggesting use of more modern gage data and accounting for future anticipated changes in availability due to climate change. Staff responded that WARS currently assumes natural streamflows remain constant compared to the base period of 1958-1987, and that OWRD has submitted a request to



the Legislature for funding to update the base period and expand gaging to fill in gaps. Staff agreed to follow up with cost estimates. Another RAC member responded that updating the base period alone would not account for impacts of climate change.

Draft Rules – Division 410

Staff reviewed the proposed changes to Division 410, including a reminder of the broad objective of this rulemaking, as follows:

690-410-0060(1) and 690-410-0070(1)

Staff noted that the proposed changes align the rules with the change that “over-appropriated” will apply to surface water while “overdrawn” will apply to groundwater.

690-410-0070(2)(b)

Staff noted that the proposed change requires a positive finding that water is available and aligns the rules with the change that “over-appropriated” will apply to surface water while “overdrawn” applies to groundwater.

A RAC member noted that the phrasing of these rules requires OWRD to allocate water when it is available and that it may be appropriate to include a word such as “only” or “may.”

Another RAC member commented that defining “water is available” as not “overdrawn” links the definition to Division 8, which could cause unintended consequences for the Deschutes mitigation program in Division 505.

Another RAC member requested and received clarification about the rationale for changing the rules so that “over-appropriated” will apply to surface water while “overdrawn” will apply to groundwater.

Another RAC member asked about circumstances when OWRD would grant a permit based on the public interest despite water not being available. Staff responded that instream water rights are the only context in which they are aware of a public interest finding overriding water availability, noting that such rights are not typically able to make a call for regulation because they are relatively junior within the prior appropriations system.

Break from 9:50-10 a.m.

Streamflow Depletion

Staff reviewed the science behind the process of streamflow depletion caused by groundwater pumping. A RAC member asked whether protecting against all streamflow depletion would allow any expansion



of agriculture through additional groundwater pumping. The same member noted that shifting the burden of proof for lack of stream depletion impacts from OWRD to a permit applicant would add additional cost to applying. Another RAC member suggested that issuance of new groundwater permits by OWRD impacts existing surface water rights holders.

Current Division 9 Rules & Policy Shortcomings

Staff reviewed shortcomings of the current Division 9 rules and policy. RAC members discussed the relevance of the threshold of 5 cubic feet per second in the current Division 9 definition of “Potential for Substantial Interference” or PSI. A RAC member suggested that PSI should be presumed for all groundwater pumping. Staff clarified that groundwater rights currently may be issued in cases with PSI if the impacted surface water is available during the period of proposed use.

Draft Rules – Division 9

Staff presented the proposed updates to Division 9 as follows:

690-009-0010(1), (2), and 690-009-0030 (deletion)

Staff described how the proposed changes consolidate language from rule 690-009-0030 along with related rule 690-009-0010. A RAC member asked why OWRD proposes to replace the term “surface water body” with “surface water source,” noting that the term “source” may be defined as the headwater so that the remainder is not protected. Staff clarified that the change aligned with similar use of the term “source” in other rules.

690-009-0020(1) and (2)

Staff described how the proposed rules remove terms no longer referenced in Division 9 or consistent with hydrogeologic principles applied in the relevant analyses. The term “effective and timely” was added to support rule 690-009-0050.

690-009-0020(3)

Staff described the updated definition for hydraulic connection. A RAC member requested and received clarification about the roles of well depth compared with distance between a well and stream.

690-009-0020(4)

Staff explained that the proposed definition of PSI in Division 9 is intended to function along with that of Impairment / Substantial Interference / Undue Interference in Division 8. RAC members objected to the proposed use of the term “substantial evidence” and proposed alternatives such as “best available science” or “enough evidence.” A RAC member expressed concern that that the proposed language does not sufficiently cover cumulative impacts from multiple groundwater rights. Another RAC member asked why the definition of PSI is proposed to be retained, given that potential exists by definition. Staff responded that the lack of saturated conditions (hydraulic connection) does remove the



potential for substantial interference and that PSI is referenced by other rules governing multiple state agencies.

690-009-0020(5)

Staff noted that the proposed revision supports OAR 690-009-0040(5) regarding the water availability finding.

690-009-0020(6)

Staff noted that the proposed definition is consistent with foundational scientific literature (Barlow and Leake, 2012, Streamflow depletion by wells—Understanding and managing the effects of groundwater pumping on streamflow (U.S. Geological Survey Circular 1376)).

690-009-0020(7) (deletion)

Staff noted that the term “unconfined aquifer” is not useful for the determinations proposed to be made under the proposed revisions to Division 9. A RAC member expressed concern about removing the definition of “unconfined aquifer,” which is a concept currently used to support the finding that some deep basalt aquifers are not hydraulically connected to surface water. Staff responded that degree of confinement is a spectrum, that a finding of “no hydraulic connection” can be made without considering confinement, and that determinations of hydraulic connection are not expected to change under the proposed rules.

690-009-0040(1)-(6) (deletion)

Staff described the significant revisions needed to align PSI with hydrogeologic principles, to be more protective of existing users, and to allocate groundwater in a more sustainable fashion. Staff noted that some deletions were added back into rule 690-009-0050 where they were previously cross-referenced.

690-009-0040(1)

Staff described how the proposed finding of PSI will be made using the best available information. A RAC member asked what finding would be made if the best available information was insufficient. Staff responded that they have some relevant information everywhere, such as conceptual models, and that the proposed rules require making a determination using the best available information.

690-009-0040(2)

Staff described how hydraulic connection is proposed to be a prerequisite for PSI. A RAC member asked whether the rules would specify the sources of information used to determine stream periodicity and expressed concern about variable reliability. Staff responded that the periodicity of surface water sources are not specified in rule and that periodicity constituted one of several pieces of information considered in making a hydraulic connection finding.



690-009-0040(3)

Staff noted that PSI will apply generally accepted hydrogeologic principles, as outlined in foundational scientific literature.

690-009-0040(4)

Staff described how PSI is proposed to exist if the source of wells includes streamflow depletion. Multiple RAC members suggested that PSI could be assumed to be true, considering the preceding scientific presentation. Staff noted that PSI is referenced by other rules, so that retention of the term is necessary. Staff clarified that colloquially, “hydraulic connection” is a scientific term and determination, while PSI is a policy term and determination. Staff noted that OWRD proposes that a finding of PSI is made based on the best available information, which includes a conceptual model of the hydrogeologic system, but that there is no default finding of PSI.

Other RAC members asked whether OWRD had considered limitations on the proposed definition of PSI that would allow for de minimis streamflow depletion impacts, such as considering whether streamflow depletion is measurable. Staff responded that they had considered de minimis impacts but had found it difficult to establish a threshold that would be applicable statewide and that could be calculated with available information. Staff solicited from RAC members specific suggestions that addresses the overall goals set by the Commission of allocating future groundwater uses in a more sustainable manner and being more protective of existing users.

Multiple RAC members voiced concern that more widespread findings of PSI would trigger more frequent inter-agency reviews under Division 33, that the mitigation requirements imposed through those reviews are frequently not achievable, and that the relevant agencies are difficult to meet with.

Another RAC member suggested that peer review would be appropriate for findings of PSI, and another asked if technical reviews of groundwater applications already receive peer review. Staff confirmed that PSI findings frequently receive additional review by a senior hydrogeologist and always receive cursory review by the groundwater section manager. Staff noted that many reviewers also meet with agents for applicants in the course of conducting the technical review.

690-009-0040(5)

Staff described how the proposed finding of PSI would affect the finding of “water is available”. A RAC member noted that the rule seems unnecessarily complicated and suggested replacing the phrase “may mean” with “will mean.” Staff further described how a finding of PSI prompts the Water Right Section to review the components of Impairment, Substantial Interference, or Undue Interference as detailed in Division 8. For streams with available water (e.g., the main-stem Willamette River) a finding of PSI would not result in a finding of water not available, because there is water available for further appropriation in the hydraulically connected stream. In this example the new groundwater use would be debited from the appropriate surface water availability account in WARS.



690-009-0040(6)

Staff described how a finding of PSI is required for controlling groundwater under rule 690-009-0050.

690-009-0050(1)-(3)

Staff described how the proposed revisions moved relevant language from rule 690-009-0040 to 690-009-0050 and added a preamble to connect the rules. A RAC member and staff clarified the role of evaluating horizontal distance between a well and a stream. Another RAC member suggested that rule 690-009-0050 seems inconsistent with the proposed revisions to the rest of Division 9. Staff responded that rule 690-009-0050 has not functionally changed under the proposed revisions and that the preferred method going forward for regulating groundwater is through establishing a Critical Groundwater Area. The RAC member replied that this rule is another method so potentially worth expanding.

Break from 11:17-11:30 a.m.

Public Comment

Glen Barrett (Klamath Basin farmer, President of Water for Life) stated that he thought the proposed rules would be devastating for agriculture. He noted that pumping groundwater during drought provides benefits to riparian areas, and those benefits have not been addressed. He further noted that a lot of area in the Klamath basin has had to rely on groundwater to address the Endangered Species Act and water rights adjudication process. He acknowledged that such groundwater use may be short-term but was necessary for now. He further asked about economic impacts. He noted that wells approved in the past have been developed for business, but now, new rules, combined with Critical Groundwater Area rules, will be shutting down people who have developed their wells. He stated that he thinks there will be a huge impact based on these rules and need an economic study. OWRD staff responded that part of the rulemaking process does include a statement of fiscal and economic impacts, completed as part of the notice of proposed rulemaking submitted to the Secretary of State. Mr. Barrett asked how many wells developed under the current rules will be shut off as a result of the rule changes. Staff clarified that these rules only apply to new applications for groundwater allocation.

RAC Roundtable – Discussion

RAC members shared their thoughts on the proposed changes to Divisions 410 and 9, summarized as follows:

A RAC member asked if the proposed edits have been reviewed by the Department of Justice (DOJ), suggesting that OWRD should be considerate of litigation that occurs frequently in the Klamath Basin. Staff responded that DOJ has reviewed the draft and will review again prior to public notice.



Another RAC member asked if the process of peer review was described in the rules. Staff responded that it is not, and the RAC member reiterated a concern that the peer review may not happen if it was not defined in rule.

Multiple RAC members requested more presentation and evaluation of how the rules work together and suggested that OWRD could do more to make the rules more user friendly, readable, and robust to unintended consequences. Other RAC members appreciated the flow charts and cross-references presented so far by OWRD and requested more of the same to understand how the rules interact. Other RAC members recognized the public engagement work that OWRD has already done, such as the outreach meetings in 2022.

Multiple RAC member requested consideration of the timeline with sufficient time for the rules to be understood by the RAC and by stakeholders, considering constraints from the legislative session and holidays.

A RAC member suggested that retaining the term PSI makes the proposed rules confusing and that the definition of “depletion” doesn’t include any qualifying language associated with PSI. The RAC member suggested including the word “depletion” in PSI, as well as adding a preamble to help readers understand the significance of the proposed language.

A RAC member asked how regulation of water rights for non-use impacts these proposed rules. The member noted a lack of compliance and enforcement and suggested that the problem should be addressed as part of this rule revision. Another RAC member concurred.

A RAC member appreciated the work of OWRD to protect senior users and the whole of the resource. Multiple RAC members approved of OWRD’s approach to hydraulic connection. Multiple RAC members requested consideration of the economic impact of issuing further groundwater permits on streamflows, which support commercial and recreational fisheries, as well as Tribal activities.

Another RAC member suggested that the proposed rules will change practice from issuing a lot of groundwater permits to virtually none, because hydraulic connection combined with over-appropriated of surface water will trigger a finding that water is not available. The member expected some exceptions for deep basalt or ephemeral streams but asked for additional consideration of acceptable de minimis stream depletion impacts. The member suggested that not allowing de minimis impacts will have a huge impact on ability to develop additional farmland. Staff solicited specific suggestions for de minimis impacts. Another RAC member responded that there is no such thing as a de minimis impact if one accounts for the full spatial scale and time frame for stream depletion.



A RAC member requested consideration of how these proposed rules impact water users on a border with a state with less strict regulation.

A RAC member asked how the seasonality of surface water availability impacts groundwater availability. Another RAC member advocated for the update to WARS and suggested that it should enable forward-looking availability.

A RAC member indicated that the current process has been mischaracterized as an easy process, which it is not. The member stated his belief that that current rules are not well founded in science and are instead a blunt instrument. The member also stated that he believes no new groundwater permits will be issued under the new rules, questions if WARS is accurate and reliable, thinks that a de minimis impact should be allowed, and is very concerned about a huge detrimental impact of farming communities.

A RAC member appreciated the staff suggestion to separate policy from hydrology in interpretation of terms in rule such as “hydraulic connection” and “PSI.” The member suggested updating WARS to look into the future and not to the most recent history/data. The member indicated de minimis impacts only makes sense if we look at one point in time, but if we consider long-term impacts then there is no such thing as de minimis.

A RAC member asked OWRD to recognize efforts to conserve water by nurseries.

A RAC member asked how OWRD would process applications already submitted. Staff acknowledged that any applications received before effective date will be processed under the existing rules.

Wrap- Up and Next Steps

Staff presented the plan for the next RAC meeting on June 21st, requesting input on draft rule language presented so far by June 7th. Staff will review all the draft rules at the next meeting. Meeting was adjourned.