

Groundwater Allocation Process Rulemaking

Oregon Water Resources Department
Rules Advisory Committee Meeting
June 21, 2023

Welcome & Agenda



Meeting Agenda

Schedule	Topic	Lead/Presenter
8:30 am	Welcome & Agenda	Annette Liebe
	RAC Meetings 2 & 3	
	 RAC Meetings 2 & 3 Draft Summaries 	Annette Liebe
	 RAC Meetings 2 & 3 Comments 	
	Proposed GW Allocation Process	Justin Iverson
	Revised Draft Rules – Review (with Break as needed)	Justin Iverson
	 Divisions 8, 9, 300, 400, 410 	Justili iveisoii
	Notice of Proposed Rulemaking - Draft Statements	
	• Need	Laura Hartt
	Racial Equity Impacts	Laura Hartt
	 Fiscal & Economic Impacts 	
	RAC Roundtable – Discussion	Annette Liebe
Break (as needed)		
11:30 am	Public Comment	Annette Liebe
By noon	Wrap-up & Next Steps	Annette Liebe

RAC Meetings 2 & 3



RAC Meetings 2 & 3

- Corrections made to RAC 2 Draft Meeting Summary and posted online.
- Any questions, comments or corrections to the RAC 3 Draft Meeting Summary?
- RAC 2 & RAC 3 Comments

Proposed Groundwater Allocation Process



Proposed Future Assessment of Groundwater Availability

Figure X: Proposed (Ground)Water Availability (06/13/2023) Div 300: Water is Available All three components must indicate availabilit This part to be completed by Water Rights Section

Revised Draft Rules



Objective Reminder

Update groundwater allocation rules to be more sustainable and protective of existing water right holders, both instream and out-of-stream.





Draft Rule Text Format Guide

Black text – current rule language

Red text – proposed new/revised rule language

Grey strikethrough – deleted rule language

Yellow Highlight – unless otherwise noted, new change(s) since last draft rule handout set (new since last meeting)

Division 300 – Revised Draft Rules



Division 300: Water is Available

Reasonably stable groundwater levels

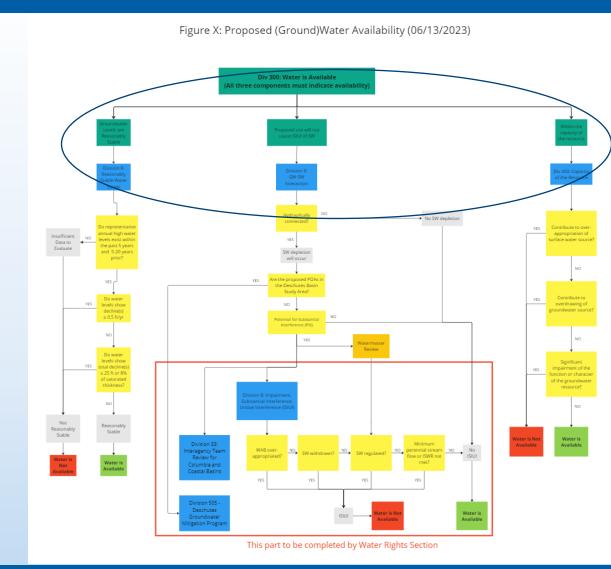
- Division 008
- Water from storage

GW interference with surface water

- Division 009
- Water from <u>capture</u>

Capacity of the resource

- Division 400
- Forward looking
- Function and character





"Water is Available" Definition - 690-300-0010(57) (a), (b) no new changes

The following definitions apply in OAR chapter 690, divisions 15, 310, 320, 330, 340, and 350 and to any permits, certificates or transfers issued under these rules:

- (57) "Water is Available," when used in OAR 690-310-0080, 690-310-0110 and 690-310-0130, means:
- (a) The requested <u>surface water</u> source is not over-appropriated under OAR 690-400-0010 and 690-410-0070 during any period of the proposed use; or
- (b) If the requested <u>surface water</u> source is already over-appropriated for any portion of the period of use proposed in a new application:
 - (A) The applicant can show the proposed use requires <u>surface</u> water only during the period of time in which the requested source is not already over-appropriated;
 - (B) The applicant has obtained or has shown the applicant can obtain authorization to use water from an alternate source to provide water needed during any period of use in which the source is over-appropriated; or
 - (C) If the applicant has shown they can obtain authorization to use water from an alternate source during the time water is unavailable, the department conditions the approval of the application to require that prior to diversion of water the applicant obtains authorization for use of water from the alternate source.



"Water is Available" Definition - 690-300-0010(57)(c) no change

- (57) "Water is Available," when used in OAR 690-310-0080, 690-310-0110 and 690-310-0130, means:
- (c) For surface water applications received before July 17, 1992, the provisions of subsection (a) of this section shall apply except that the determination of whether a requested source is over-appropriated under OAR 690-400-0010 and 690-410-0070 shall be based upon whether the quantity of water available during a specified period is not sufficient to meet the expected demands for all water rights at least 50 percent of the time during that period.



"Water is Available" Definition - 690-300-0010(57)(d)-(f) revised

(57) "Water is Available," when used in OAR 690-310-0080, 690-310-0110 and 690-310-0130, means:

- (d) The requested groundwater source is not overdrawn under OAR 690-008-0001, and when existing appropriation has occurred from the requested source that water levels are reasonably stable under OAR 690-008-0001 as measured at one or more representative wells; and
- (d) The requested groundwater source exhibits reasonably stable water levels, as defined in OAR 690-008-0001; and
- (e) The proposed use will not impair or substantially interfere with existing rights to appropriate surface water, as per the rules governing groundwater interference with surface water in OAR 690-009-0010 through 0040; and
- (c) (f) The proposed use is available within the capacity of the resource as defined in OAR 690-400-0010 (4).

Division 8 – Revised Draft Rules



Division 8: Reasonably Stable

Division 8 definitions edited to incorporate RAC comments:

- "Reasonably stable" definition updated
- Added definition for "annual high water level"
- Removed"declining"

This part to be completed by Water Rights Section

Figure X: Proposed (Ground)Water Availability (06/13/2023)

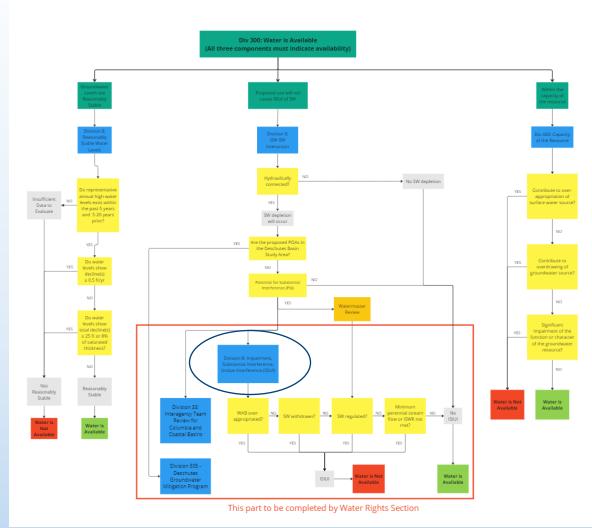


Division 8: Other Definitions

Division 8 definitions edited to incorporate RAC comments:

- Minor edits to:
 - "aquifer",
 - "excessively declined",
 - "impair"/"interfere"
- Revert "overdraw" to current language with minor edits

Figure X: Proposed (Ground)Water Availability (06/13/2023)





"Annual High Water Level" Definition - 690-008-0001(1) new

A number of terms are used in the statutes, ORS 537.505–537.795, prescribing the management of ground water in Oregon. These rules define terms to qualify and clarify the statutes. In all statutes and rules employed in the management of ground water by the Water Resources Department and Commission, the following definitions shall apply, unless the context requires otherwise:

(1) "Annual high water level" in a groundwater reservoir or part thereof means the highest elevation (shallowest depth) groundwater level that exists in a year. In the absence of detailed analysis, the annual high water level may be assumed to be represented by the highest water level measured during the period from January through April. For some purposes and in some cases the annual high may be estimated using measurements made during other parts of the year.



"Aquifer" Definition – 690-008-0001(1)/(2) no new changes

(42) "Aquifer" means a geologic formation, group of formations, or part of a formation that contains saturated and permeable material capable of transmitting water in sufficient quantity to supply wells or springs and that contains water that is similar throughout in characteristics such as potentiometric head, chemistry, and temperature. a water-bearing body of naturally occurring earth materials that is sufficiently permeable to yield useable quantities of water to wells and/or springs.



"Declined Excessively" Definition - 690-008-0001(4)/(5) revised

- (45) "Declined Excessively" means any cumulative lowering of the water levels in a ground water reservoir or a part thereof which:
 - (a) Precludes, or could preclude, the perpetual use of the reservoir; or
 - (b) Exceeds the economic pumping level; or
 - (c) Constitutes a decline determined to be interfering with: substantially interfere with a surface water source as defined in OAR 690-008-0001 (8).
 - (A) A surface water diversion having a priority date senior to the priority dates of the causative ground water appropriations; or
 - (B) A surface water body that has been administratively withdrawn with an effective date senior to the priority dates of the causative ground water appropriations unless the causative ground water appropriations are for uses that are exception to the withdrawals; or
 - (C) An adopted minimum stream flow or instream water right, or closure having an effective date senior to the priority dates of the causative ground water appropriations; or
 - (D) A surface water body which has a classification that is senior to the priority date of the causative ground water appropriation(s) and the use or uses to which the ground water is being put are not included in the classification.



"Declined Excessively" Definition - 690-008-0001(4)/(5) minor correction

- (45) "Declined Excessively" means any cumulative lowering of the water levels in a ground water reservoir or a part thereof which:
 - (d) Constitutes a lowering of the annual high water level within a ground water reservoir, or part thereof, greater than 50 feet below the highest known water level; or
 - (e) Results in ground water pollution; or
 - (f) Constitutes a lowering of the annual high water level greater than 15% of the greatest known saturated thickness of the ground water reservoir.

 † The saturated thickness shall be calculated using pre-development water levels and the bottom of the ground water reservoir, or the economic pumping level, whichever is shallower.



"Declining Groundwater Levels" New Definition - 690-008-0001(5) removed

- (5) "Declining Groundwater Levels" means that, for a well:
 - (a) The representative annual high water level for the year under evaluation:
 - (A) indicates an average rate of decline in representative annual high water levels of at least 0.5 foot per year over all immediately preceding averaging periods between 5 and 20 years that can be evaluated; or
 - (B) is at least 25 feet deeper than the first measured representative annual high water level. If preceding water level data in nearby wells accessing the same aquifer are sufficient to establish the water level elevation as it would have existed earlier in the subject well, then that water level may be used to represent the annual high water level.
 - (b) In the absence of more recent data, a finding of declining water levels may be presumed to persist for a maximum of 5 years if based on the average rate of decline as in (a)(A) above, or indefinitely if based on decline from the first measurement, as described in (a)(B) above.
 - (c) This definition may be superseded by a basin program rule adopted pursuant to the Commission's authority in ORS 536.300 and 536.310, but such a definition must also indicate declining groundwater levels whenever they would be indicated by this statewide rule. A superseding definition must also be consistent with the superseding definition of "Reasonably Stable Water levels" in OAR 690-008-0001(10) such that water levels cannot be both reasonably stable and declining.



Impairment/Interference New Definition - 690-008-0001(9)(a) revised



"Impairment", "impair", "substantial interference", "substantially interfere", "undue interference", or "unduly interfere" "Substantial or Undue Interference" means the spreading of the cone of depression of a well to intersect a surface water body source or another well, or the reduction of the ground water gradient and flow levels as a result of pumping or otherwise extracting groundwater from an aquifer, which contributes to:

- (a) <u>Depletion of a surface water source</u> A <u>reduction in surface water availability to an</u> extent that:
 - (A) is already over-appropriated during any period of the year; or
 - (B) is administratively or statutorily withdrawn; or
 - (C) is restrictively classified; or
 - (D) is the source for oone or more senior existing surface water appropriators rights are unable to use either their permitted or customary quantity of water, whichever is less that have been regulated off due to insufficient supply to satisfy senior surface water rights or is subject to a rotation agreement to address limited surface water supplies; or
 - (E) An adopted has a minimum perennial streamflow or instream water right with an effective date senior to the causative ground water appropriation(s) cannot be satisfied that is unmet during any period of the year.



Impairment/Interference New Definition - 690-008-0001(9)(b), (c) no new changes

(10)(8)

"Impairment", "impair", "substantial interference", "substantially interfere", "undue interference", or "unduly interfere" "Substantial or Undue Interference" means the spreading of the cone of depression of a well to intersect a surface water body source or another well, or the reduction of the ground water gradient and flow as a result of pumping, which contributes to:

•••

- (b) The ground water level being drawn down to the economic level of the senior appropriator(s); or
- (c) One or more of the senior ground water appropriators being unable to obtain either the permitted or the customary quantity of ground water, whichever is less, from a reasonably efficient well that fully penetrates the aquifer where the aquifer is relatively uniformly permeable. However, in aquifers where flow is predominantly through fractures, full penetration may not be required as a condition of substantial or undue interference.



"Overdraw/Overdrawing" Definition-690-008-0001(7)/(8) reverted back w/ minor changes

- (29) "Overdraw" or "Overdrawing" means to artificially produce water, in any one-year period, from a ground water reservoir, or part thereof, at an annual rate that:
 - (a) Exceeds the average annual recharge to that ground water supply over the period of record; or
 - (b) Reduces surface water availability resulting in:
 - (A) One or more senior appropriators being unable to use either their permitted or customary quantity of surface water, whichever is less; or
 - (B) Failure to satisfy an adopted minimum streamflow or instream water right with an effective date senior to the causative ground water appropriation(s)-; or
 - (c) Reduces the availability of surface waters that have been:
 - (A) Withdrawn with an effective date senior to the priority dates of the causative ground water appropriations; or
 - (B) Restrictively classified with an effective date senior to the priority date(s) of the causative ground water appropriations.



"Reasonably Stable Groundwater Levels" New Definition – 690-008-0001(10)(a) revised

(10) "Reasonably Stable Groundwater Levels" means:

- (a) The annual high water levels as measured at one or more representative wells in a ground water reservoir or part thereof:
 - (A) <u>indicate no decline or</u> an average rate of decline of less than 0.5 feet per year over any immediately preceding averaging period with duration between 5 and 20 years. If data are insufficient to perform this test, then the Department will presume that water levels are not reasonably stable; and
 - (B) Compared with the highest known water level, have not declined or have declined by less than the smaller of 25 feet and 8% of the greatest known saturated thickness of the ground water reservoir.



"Reasonably Stable Groundwater Levels" New Definition – 690-008-0001(10)(b), (c) revised

(10) "Reasonably Stable Groundwater Levels" means:

- (b) Water level data must be available in the year under evaluation to perform the tests in (a). However, in the absence of current data, a finding of reasonable stability may be presumed to persist for a maximum of 5 years beyond the most recent groundwater level measurement in the record.
- (c) This definition may be superseded by a basin program rule adopted pursuant to the Commission's authority in ORS 536.300 and 536.310, but such a definition may not be less stringent than OAR 690-008-0010(10).



"Substantial Thermal Interference" 690-008-0001(12) revised

(1012) "Substantial Thermal Interference" means the spreading of the radius of thermal impact of a low-temperature geothermal production well or low-temperature geothermal injection well to intersect a surface water source or another well, or the reduction of temperature or heat flow as a result of pumping or injection, which contributes to change in groundwater or surface water temperature to an extent that one or more senior appropriators of the low-temperature resource are unable to use water for the purpose(s) designated in the associated water right.

Division 9 – Revised Draft Rules

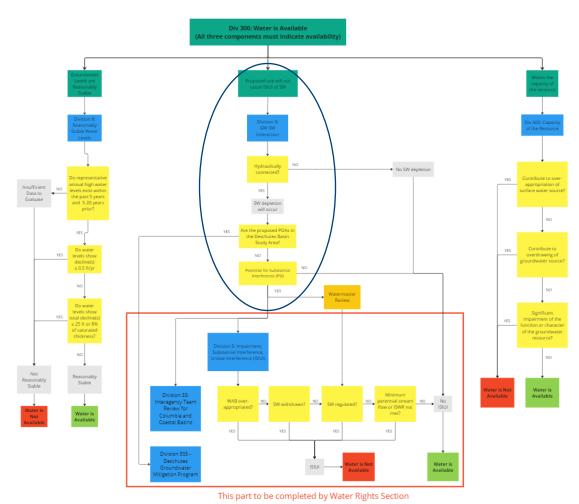


Division 9: Groundwater Interference with Surface Water

Division 9 minor edits as per RAC comments:

- "Substantial evidence" removed from rule language
- Remaining language the same as previously presented

Figure X: Proposed (Ground)Water Availability (06/13/2023)





"Basis for Regulatory Authority, Purpose, and Applicability" 690-009-0010(1) minor correction

(1) The right to reasonable control of the ground water groundwater of the State of Oregon has been declared to belong to the public. Through the provisions of the Ground Water Act of 1955, ORS 537.505 to 537.795, the Water Resources Commission has been charged with administration of the rights of appropriation and use of the ground water resources of the state. These rules govern the use of ground waters, pursuant to 537.730 and 537.775, where the ground water is hydraulically connected to, and the use interferes with, surface waters.



"Potential for Substantial Interference" New Definition - 690-009-0020(4) revised

(4) "Potential for Substantial Interference", or "PSI", means that substantial evidence exists to determine that a groundwater use will cause streamflow depletion based on the assessments described in OAR 690-009-0040, and therefore may cause or has caused impairment to, substantial interference with, or undue interference with a surface water source, based on the definitions in OAR 690-008-0001.



Determination of Hydraulic Connection/PSI 690-009-0040(4), (5) revised

Determination of Hydraulic Connection and Potential for Substantial Interference

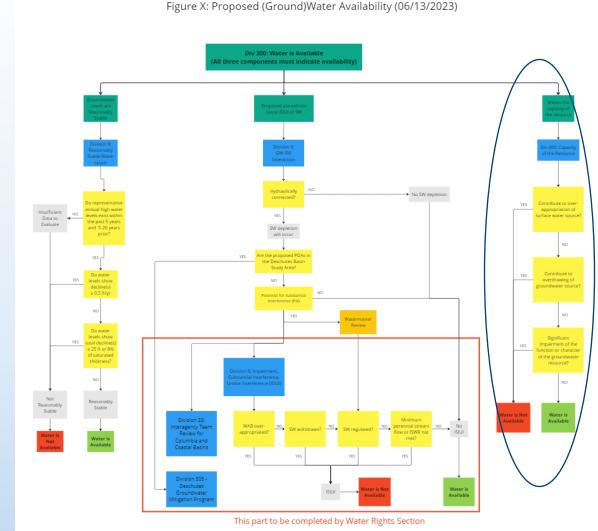
- (4) The potential for substantial interference with a surface water source exists if substantial evidence indicates the well(s) under consideration will, over the full term of the proposed or authorized groundwater use, obtain water from streamflow depletion.
- (5) For the purposes of issuing a permit for a proposed groundwater use, a finding of potential for substantial interference with a surface water source may mean that water is not available for the proposed groundwater use if the use will impair, substantially interfere, or unduly interfere with a surface water source as per the definitions in OAR 690-008-0001 and OAR 690-300-0010 and OAR 690-400-0040.

Divisions 400 & 410 – Revised Draft Rules



Division 400: State Water Resources Policy Division 410-0070: Water Allocation

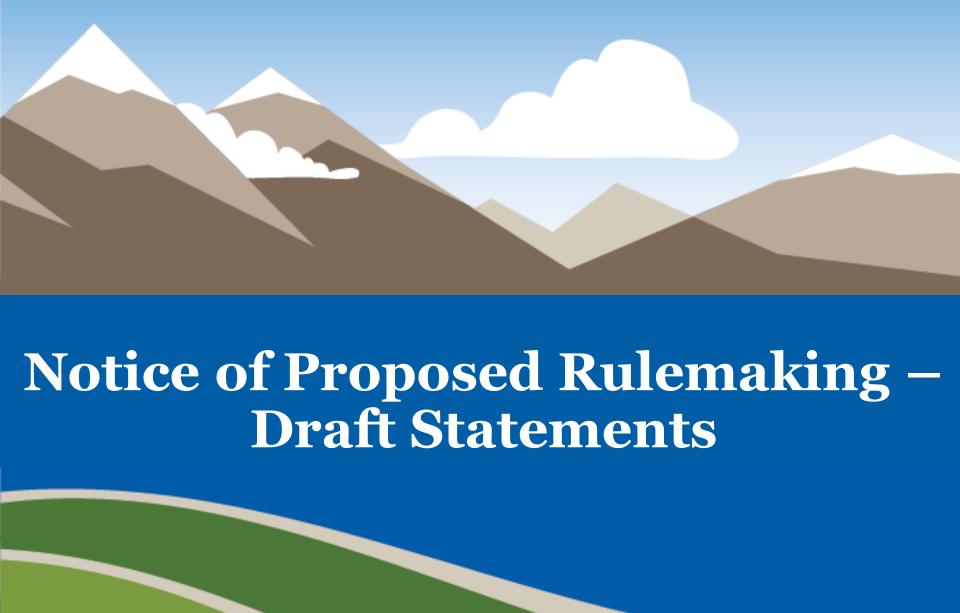
- Division 400: remains the same as presented in earlier RACs
- Division 410:
 minor edit to
 match new
 definition of
 water is available
 in Division 300





"Water Allocation" Principles - 690-410-0070(2)(b) revised

- (2) Principles. Programs to achieve the policy in section (1) of this rule shall be guided by the following principles: ...
 - (b) The groundwater of the state shall be allocated to new beneficial uses only when water is available for a proposed use as per the definitions in OAR 690-300-0010, OAR 690-008-0001, OAR 690-009-0010, and 690-400-0010 the allocations will not contribute to the over appropriation of groundwater sources. Restrictions on allocations of water for exempt groundwater uses may be considered when a groundwater source is over-appropriated drawn;





Objective Reminder

Update groundwater allocation rules to be more sustainable and protective of existing water right holders, both instream and out-of-stream.





Rulemaking Need

Preservation of the public welfare, safety, and health, as required by the Ground Water Act of 1955, depends in part upon a positive finding that water is available. The Oregon Water Resources Commission has directed the Oregon Water Resources Department to update its rules for evaluating applications for new groundwater rights in a manner that is more sustainable and protective of existing groundwater and surface water rights.



Racial Equity Impacts

Based on our 2 Rulemaking Objectives

(1) Protection of Existing Water Rights

- Prior appropriation system
- Preserves status quo re: water rights holders
- Not likely to improve racial equity

(2) Protection of Finite Water Resources

- Non-consumptive/instream benefits enjoyed by all
- Water for future generations
- Neutral or likely to improve racial equity



Fiscal & Economic Impacts

Based on our 2 Rulemaking Objectives

(1) Protection of Existing Water Rights

- Future availability for existing uses more certain
- Limited opportunity for new permitted uses
- May require conservation/transfers for new uses

(2) Protection of Finite Water Resources

 Non-consumptive economic benefits may include fishing, wildlife habitat, recreation, commercial, cultural, water quality, drought mitigation, hydropower, scenic

RAC Roundtable

Public Comment

Wrap Up/Next Steps



Wrap Up/Next Steps

Email Rules Coordinator (laura.a.hartt@water.oregon.gov)

- Any additional input regarding today's draft rules and statement of need/ racial equity impacts/ economic & fiscal impacts by July 7, 2023
- Suggestions on how to improve meeting logistics

Next RAC Meeting

- When: August 2, 2023, from 8:30 am noon
- Where: Rogue Conference Room, 3rd Floor, OWRD, Salem & via Zoom

