

HARTT Laura A * WRD

From: Lisa Brown <lisa@waterwatch.org>
Sent: Wednesday, April 26, 2023 4:39 PM
To: HARTT Laura A * WRD
Subject: WaterWatch initial comments on draft Div. 400 rules
Attachments: Div 400 (041323)_WW initial comments (4-26-2023).docx

Hi Laura,

I am attaching my initial comments and track edits to the draft Div. 400 rules. I'm not sure how it will look on your screen, but on mine the WRD edits are in dark red and mine are a not much brighter red – so you might have to look closely for them. I didn't have any suggestions at this point on the draft Div. 300 rules. I may have more suggestions as we go through the other divisions given everything is inter-related.

Let me know if you have any questions or would like to discuss.

Thank you,

Lisa Brown
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WaterWatch of Oregon
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**Water Resources Department
Chapter 690
Division 400**

STATE WATER RESOURCES POLICY

690-400-0000

Purpose and Authorization

(1) These rules, and those contained in division 410, establish statewide policies and principles pertaining to a wide range of water-related topics. All Water Resources Commission and Department activities, including but not limited to:

(a) Basin planning;

(b) Interagency coordination; and

(c) Development and adoption of rules, standards, and implementing strategies to govern Department programs and activities, shall be compatible with these rules and those contained in division 410.

(2) ORS 536.220 authorizes a single state agency, the Water Resources Commission, to formulate and implement an integrated, coordinated state water resources policy. The Water Resources Commission shall progressively formulate plans and programs to develop the water resources of the state and provide for the enforcement of state water policy. State water resources policy must promote the maximum beneficial use of the waters of the state. Multiple water uses shall be preferred over single-purpose uses. Existing water rights shall be protected in accordance with relative priority dates except as they may be temporarily modified under emergency drought circumstances. The Commission shall, in adopting policies that affect the appropriation and control of water resources, design those policies to best protect and promote the general public welfare.

(3) The Water Resources Commission is required by ORS 536.300(2) to develop a state program for managing Oregon's water. The Commission has established the Oregon Water Management Program which consists of statewide policies (OAR 690, divisions 400 and 410), basin programs (OAR 690, divisions 500 to 520) and non-rule program direction for implementing statewide policies and basin level actions (ORS 536.430).

(4) In formulating the Oregon Water Management Program, the Commission shall consider declarations of policy provided in ORS 536.310. These declarations mandate the consideration of existing rights, economic development, human consumptive needs, multiple uses, groundwater quality, protection of wildlife, recreation, watershed management, and other priorities outlined by the Legislature. These rules, and those contained in division 410, are adopted as statements for inclusion in the integrated, coordinated state water resources policy required under ORS 536.300.

(5) The programs and plans of the Commission are to reflect all laws that relate to or affect the use and control of the water resources of the state (ORS 536.330). The Legislature, in ORS 536.360, directs every state agency and public corporation to conform to statements of state water resources policy as adopted by the Water Resources Commission.

Statutory/Other Authority: ORS 536
Statutes/Other Implemented: ORS 536
History:
WRD 8-1990, f. & cert. ef. 6-25-90

690-400-0010
Definitions

As used in the rules contained in divisions 400 and 410, unless the context requires otherwise:

(1) "Allocate" means to determine allowable new uses by classifying waters through basin program rules, withdrawing waters, reserving water for future economic development by order, or issuing water rights for waters of the state.

(2) "Artificial Groundwater Recharge" means the intentional addition of water to a groundwater reservoir by diversion from another source (OAR 690-011-0010(2)).

(3) "Beneficial Use" means an instream public use or a use of water for the benefit of an appropriator for a purpose consistent with the laws and the economic and general welfare of the people of the state and includes, but is not limited to, domestic, fish life, industrial, irrigation, mining, municipal, pollution abatement, power development, recreation, stockwater and wildlife uses.

(4) "Capacity of the Resource" means the ability of a surface water or groundwater resource to sustain a balance of public and private uses without ~~causing-contributing to over-appropriation as defined in OAR 690-400-0010(11);~~ or otherwise significantly impairing the function or character of the resource. ~~For groundwater, significantly impairing the function or character of the resource, which occurs- includes but is not limited to when any of the following conditions, as defined in OAR 690-008-0001, exist or impend:~~

~~(a) Groundwater levels are not reasonably stable; or,~~

~~(b) Substantial or undue interference exists among wells; or,~~

~~(c) The groundwater resource is overdrawn.~~

~~(d) [ADD a criteria addressing impacts to the ecological function of groundwater]~~

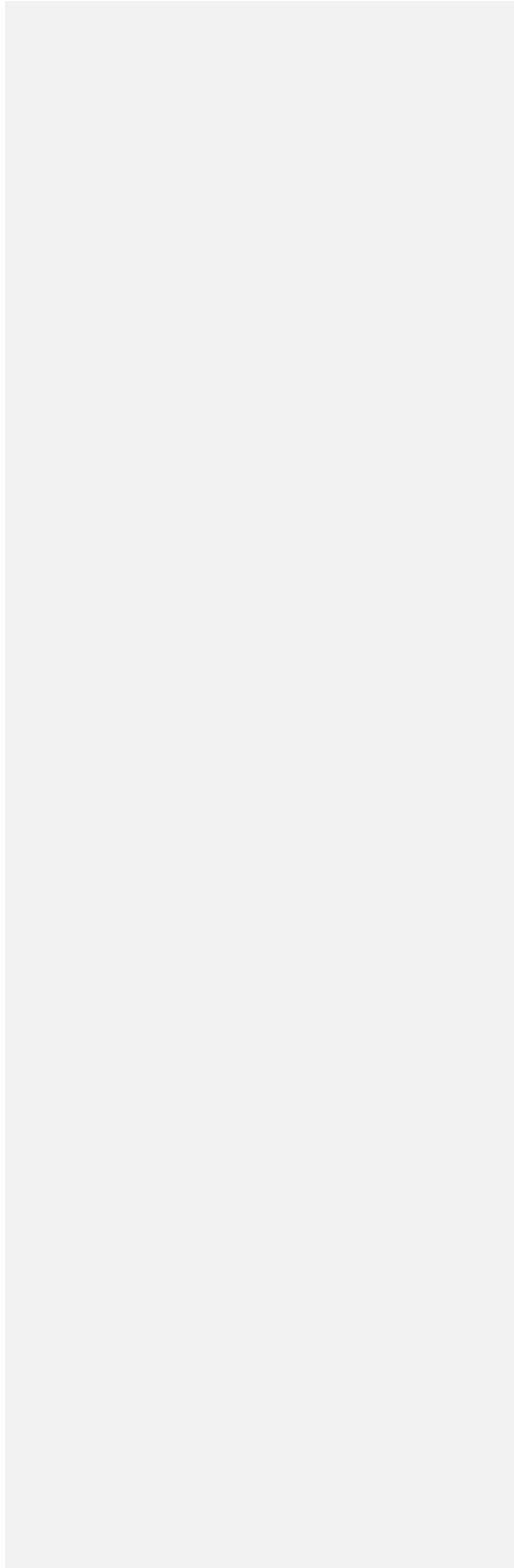
(5) "Conservation" means eliminating waste or otherwise improving efficiency in the use of water while satisfying beneficial uses by modifying the technology or method for diverting, transporting, applying or recovering the water, by changing management of water use, or by implementing other measures.

(6) "Customary Quantity" means the rate or annual amount of appropriation or diversion of water ordinarily used by an appropriator within the terms of that appropriator's water right (OAR 690-008-0001(3)).

(7) "Emergencies" means situations, including but not limited to wildfire, flooding, and toxic spills, which pose an immediate and significant threat to life, health, property, or water or riparian resources.

Commented [LB1]: The items below pertain only to groundwater, so I think it needs to be clear those are not being described here for SW. This needs to be made clear.

(8) "Management Activity" means an activity in a riparian area which is planned and undertaken to extract, manipulate, or control natural resources or natural processes. Management activities include



but are not limited to timber harvest, reforestation, road construction or reconstruction, spraying of herbicides or pesticides, grazing, mining, or cultivation.

(9) "Mitigation" means the reduction of adverse effects of a proposed project or activity by considering, in the following order:

- (a) Avoiding the impact altogether by not taking a certain action or parts of an action;
- (b) Minimizing impacts by limiting the degree or magnitude of the action and its implementation;
- (c) Rectifying the impact by repairing, rehabilitating or restoring the affected environments;
- (d) Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action by monitoring and taking appropriate corrective measures; and
- (e) Compensating for the impact by replacing or providing conditions of comparable substitute value.

(10) "Non-Structural" refers to processes that primarily utilize the natural watershed or natural aquifer storage, rather than structural means.

(11) ~~(a)~~ "Over-Appropriated" means a condition of water allocation in which:

~~(Aa)~~ The quantity of surface water available during a specified period is not sufficient to meet the expected demands from all water rights at least 80 percent of the time during that period; or

~~(b)~~ The appropriation of groundwater resources by all water rights exceeds the average annual recharge to a groundwater source over the period of record or results in further depletion of the groundwater source; or

~~(Bb)~~ ~~(c)~~ The appropriation of groundwater resources by all water rights exceeds the average annual recharge to a groundwater source over the period of record or results in the further depletion of a groundwater source has a hydraulic connection, as per the definition in OAR 690-009-0020, ed to an already over-appropriated surface water source that is over-appropriated at any time of year as per the definition in OAR 690-009-0020; or

~~(c)~~ ~~(d)~~ Groundwater levels are not reasonably stable as defined in OAR 690-008-0001.

~~(bd)~~ The standards for determining over-appropriation described in paragraph (Aa) of this subsection shall apply to water availability determination for permit applications submitted after July 17, 1992.

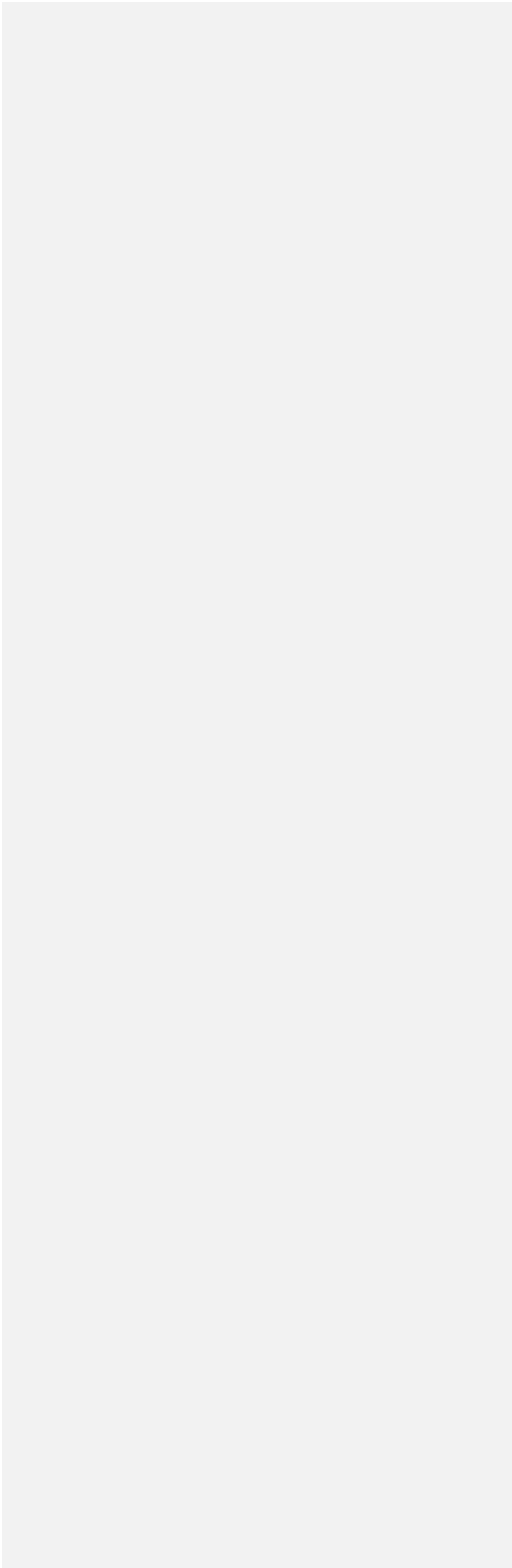
(12) "Public Interest," as a standard for reviewing new uses of water, means a beneficial use which is consistent with state law and includes providing the greatest good for the people of the state based on current values, protecting water rights and conserving water resources for present and future generations.

(13) "Public Use" means an instream use of water that is available to the public at large. It includes but is not limited to:

- (a) Recreation;

Commented [LB2]: This is the term defined in the Div 9 rules

(b) Protection and enhancement of fish life, wildlife, fish and wildlife habitat and any other ecological values;



(c) Pollution abatement;

(d) Navigation;

(e) Scenic attraction; and

(f) Any other similar or related use.

(14) "Riparian Area" means the zone of transition from an aquatic ecosystem to a terrestrial ecosystem, dependent upon surface or subsurface water, that reveals through the zone's existing or potential soil-vegetation complex, the influence of such surface or subsurface water. A riparian area may be located adjacent to a lake, reservoir, estuary, pothole, bog, wet meadow, muskeg, or ephemeral, intermittent or perennial stream.

(15) "Storage" means the retention or impoundment of surface or groundwater by natural and/or artificial means for public or private uses and benefits.

(16) "Waste" means the continued use of more water than is needed to satisfy the specific beneficial uses for which a right was granted. The need for water shall be based on using the technology and management practices that provide for the efficient use of water considering:

(a) The economic feasibility of use of the technology and management practices by the water user;

(b) The environmental impacts of making modifications;

(c) The available proven technology;

(d) The time needed to make modifications;

(e) Local variations in soil type and weather; and

(f) Relevant water management plans and subbasin conservation plans.

(17) "Watershed" means the entire land area drained by a stream or system of connected streams such that all stream flow originating in the area is discharged through a single outlet.

Statutory/Other Authority: ORS 536.025, 536.220 & 536.300 - 536.340, [ORS 537.505 - 537.795](#)

Statutes/Other Implemented: ORS 536.025, 536.220 & 536.300 - 536.340, [ORS 537.535 - 537.629](#), [ORS 537.775 - 537.780](#)

History:

WRD 3-1993, f. & cert. ef. 7-27-93

WRD 10-1992, f. & cert. ef. 7-31-92

WRD 22-1990, f. & cert. ef. 12-14-90

HARTT Laura A * WRD

From: Robyn Cook <rcook@gsiws.com>
Sent: Thursday, April 20, 2023 4:59 PM
To: HARTT Laura A * WRD
Cc: LIEBE Annette I * WRD; IVERSON Justin T * WRD
Subject: RE: Thank you/Resources for Groundwater Allocation RAC members
Attachments: Div 9 (042923).pdf; Div 8 (041923).pdf

Thank you Laura,
Justin, attached are my comments and questions for divisions 8 and 9. Please let me know if you want to discuss any of these ahead of the next meeting. Thank you for the opportunity to be part of this process.

Warmly,
Robyn

Robyn Cook, RG, PG, CWRE

Supervising Hydrogeologist

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GSI Water Solutions, Inc. | www.gsiws.com
pronouns: she, her

GSI has moved! Please note our new address above.

Please note: I work a hybrid schedule. I can be reached best through email or mobile phone.

From: HARTT Laura A * WRD (Laura.A.HARTT@water.oregon.gov) <Laura.A.HARTT@water.oregon.gov>
Sent: Thursday, April 20, 2023 4:40 PM
To: Robyn Cook <rcook@gsiws.com>
Cc: LIEBE Annette I * WRD <Annette.I.LIEBE@water.oregon.gov>; IVERSON Justin T * WRD <Justin.T.IVERSON@water.oregon.gov>
Subject: RE: Thank you/Resources for Groundwater Allocation RAC members

Hi Robyn,

You are free to provide comments on any of the Divisions at any time, but we won't really be able to discuss comments on the remaining Divisions (8, 9, 410) until we are in our next meeting. Any feedback we get for Divisions 300 and 400 we do plan to take a look at ahead of time to see if we can incorporate that feedback into revisions to present at our next meeting. Hope that makes sense?

Thanks for checking in! Laura

From: Robyn Cook <rcook@gsiws.com>
Sent: Thursday, April 20, 2023 4:08 PM
To: HARTT Laura A * WRD <Laura.A.HARTT@water.oregon.gov>
Subject: RE: Thank you/Resources for Groundwater Allocation RAC members

Hi Laura,
Thank you, that was a very interesting session. Just to clarify, do you want comments only for the divisions we discussed yesterday? Or would you also like comments on the proposed language in the other divisions?

Warmly,
Robyn

Robyn Cook, RG, PG, CWRE
Supervising Hydrogeologist

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pronouns: she, her

GSI has moved! Please note our new address above.

Please note: I work a hybrid schedule. I can be reached best through email or mobile phone.

From: HARTT Laura A * WRD (Laura.A.HARTT@water.oregon.gov) <Laura.A.HARTT@water.oregon.gov>

Sent: Thursday, April 20, 2023 1:46 PM

Subject: Thank you/Resources for Groundwater Allocation RAC members

Good afternoon RAC members,

I thank you again for attending yesterday's meeting. I think we generated some good discussion and look forward to our next meeting, scheduled for May 10, 8:30 am – noon. It will be hybrid again. Agenda, other pre-meeting materials, and meeting logistics to follow soon. Here is the registration link: [Zoom Registration](#), for those who wish to register early. I will resend out this link along with instructions for joining us in person when I send out the materials for our next meeting.

We had some requests for additional information during our meeting, which I am now providing. Our rulemaking website, where we upload all RAC-related meeting materials is here: [Groundwater Allocation Rulemaking](#). The scientific references cited during the presentation are available in the first pull down (just click the "+" symbol), labeled "Rule Information and Background." You can find hyperlinks that will take you directly to the various documents.

Our pre-meeting materials for yesterday's meeting are available in the second pull down, labeled "Rule Advisory Committee Meeting 1 – April 19, 2023."

The report summarizing input received during our public outreach meetings last fall are available in second from the bottom pull down, labeled "Public Engagement, Hearings and Comments," and is listed as "Outreach Meetings Summary Report." You also can download it directly using this link: [Outreach Meetings Summary Report](#). This file is rather large, so please give it a minute or two to download.

Also, just a quick reminder...we ask that you provide any feedback you might have by Wednesday, April 26, COB, so we can incorporate that feedback into our pre-meeting materials which we plan to send out a week in advance of our next RAC meeting.

Thanks again everyone for a great meeting! Laura

[Laura Hartt \(she/her/hers\)](#)

Water Policy Analyst

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**Water Resources Department
Chapter 690
Division 8**

STATUTORY GROUND WATER TERMS

690-008-0001

Definition and Policy Statements

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) “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.~~

(2) “Critical Ground Water Area Boundary” means a line established in a critical ground water area order on a map that surrounds an area in which one or more of the statutory criteria for critical area declaration are met and which is located either:

(a) Physically by coincidence with natural features such as ground water reservoir boundaries, hydrologic barriers, or recharge or discharge boundaries; or

(b) Administratively by surrounding an affected area when that area does not coincide with an area bounded by natural features.

(3) “Customary Quantity” means the rate or annual amount of appropriation or diversion of water ordinarily used by an appropriator within the terms of that appropriator’s water right.

(4) “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:

(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 exceptions 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.

(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.

(5) "Declining Groundwater Levels" means that water levels do not meet the definition of "reasonably stable" as defined in OAR 690-008-0001.

(56) "Economic Pumping Level" means the level below land surface at which the per-acre cost of pumping equals 70 percent of the net increase in annual per-acre value derived by irrigating. (The value is to be calculated on a five year running average of the per-acre value of the three, if there are that many, prevalent irrigated crops in the region minus the five year running average of the per-acre value of the three, if there are that many, prevalent regional non-irrigated crops.)

(67) "Excessively Declining Water Levels" (Note: "Excessively" as used in ORS 537.730(1)(a) is taken to modify both "are declining" and "have declined") means any ongoing lowering of the water level in a ground water reservoir or part thereof which:

(a) Precludes, or could preclude, the perpetual use of the reservoir; or

(b) Represents an average downward trend of three or more feet per year for at least 10 years; or

(c) Represents, over a five year period, an average annual lowering of the water level by 1% or more of the initial saturated thickness as determined by observation or investigation in the affected area; or

(d) Results in water quality deterioration.

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

(a) Depletion of a surface water source that:

(A) ~~(A)~~ is already over-appropriated during any month of the year;

what if requested time doesn't overlap with when instream isn't met (ASR)

(B) is administratively or statutorily withdrawn;

(C) is the source for one or more existing surface water rights 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;

(D) has a minimum perennial streamflow or instream water right that is not met during any time of the year.

define?

(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.

(79) "Overdraw" means to means to pump or otherwise extract groundwater from an aquifer or groundwater reservoir when artificially produce water, in any one-year period, from a ground water reservoir, or part thereof, at an annual rate that:

define? is this different than the "aquifer" definition?

(a) Groundwater levels are not reasonably stable. Ex discharge to that ground water supply over the period of record; or,

(b) The use of groundwater by existing water rights already contributes to the further depletion of surface waters that are 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).

(c) Reduces the availability of surface waters that have been:

(A) Over-appropriated during any month of the year; or

(B) Administratively or statutorily withdrawn. Withdrawn with an effective date of the causative ground water appropriations; or

where? proposed well? "nearby" well? what is "nearby" ?

(C) Restrictively classified with an effective date(s) of the causative ground water appropriations.

March? or 3/21-6/21?

(10) "Reasonably Stable Water Levels" means an annual spring static water level decline of less than one foot, and the water level change averaged over ten consecutive years displays no decline, except as otherwise defined in a basin program rule adopted pursuant to the Commission's authority in ORS

not reasonable - precip trends? one foot year to year, or over several years? Duration of static prior to measurement?

level of accuracy? 0.1 ft?

536.300 and 536.310, which definition may be no less stringent than the definition of declining excessively or excessively declined in OAR 690-008-0001.

~~(8) “Substantial or Undue Interference” means the spreading of the cone of depression of a well to intersect a surface water body or another well, or the reduction of the ground water gradient and flow as a result of pumping, which contributes to:~~

~~(a) A reduction in surface water availability to an extent that:~~

~~(A) One or more senior surface water appropriators are unable to use either their permitted or customary quantity of water, whichever is less; or~~

~~(B) An adopted minimum streamflow or instream water right with an effective date senior to the causative ground water appropriation(s) cannot be satisfied.~~

~~(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.~~

~~(911)~~ “Substantial Thermal Alteration” means any change in water temperature of a groundwater reservoir, or a part thereof, which:

(a) Precludes, or could preclude, the perpetual heating or cooling use of the groundwater reservoir; or

(b) Constitutes a change in the mean annual temperature within a groundwater reservoir, or part thereof, greater than 25 percent of the highest recorded naturally occurring Celsius (C) temperature.

~~(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 body 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.

~~(1113)~~ “Wasteful Use (of ground water)” means any artificial discharge or withdrawal of ground water from an aquifer that is not put to a beneficial use described in a permit or water right, including leakage from one aquifer to another aquifer within a well bore.

Statutory/Other Authority: ORS 537

History:

WRD 18-1990, f. & cert. ef. 12-14-90

WRD 21-1988, f. & cert. ef. 12-14-88

Water Resources Department
Chapter 690
Division 9

GROUND WATER INTERFERENCE WITH SURFACE WATER

690-009-0010

Basis for Regulatory Authority, ~~and Purpose, and Applicability~~

(1) The right to reasonable control of the ground waters 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.~~

(2) These rules **establish criteria to guide the Department** in determining whether a proposed or existing groundwater use will impair, substantially interfere, or unduly interfere with a surface water source. These rules apply to all wells, as defined in ORS 537.515 (9), and to all proposed **and existing** appropriations of groundwater except the exempt uses under ORS 537.545. The authority under these rules may be locally superseded where more specific direction is provided by the Commission after the effective date of adoption of these rules.

Statutory/Other Authority: ORS 537
History:
WRD 17-1988, f. & cert. ef. 11-4-88

690-009-0020

Definitions

Unless the context requires otherwise, as used in these rules:

why removed?

~~(1) "Confined Aquifer" means an aquifer in which ground water is under sufficient hydrostatic head to rise above the bottom of the overlying confining bed, whether or not the water rises above land surface.~~

~~(2) "Commission" means the Water Resources Commission.~~

~~(3) "Confining Bed": means a layer of low permeability material immediately overlying a confined aquifer.~~

~~(4) "Department" means the Water Resources Department, its Director, and all personnel employed by the Department, and consists of the Director of the Department and all personnel employed in the Department including but not limited to all watermasters appointed under ORS 540.020 (536.039).~~

(2) "Effective and timely manner" is a determination made on a case-by-case basis considering the best available information and reasonably accepted hydrogeologic methods and taking into consideration whether regulation will result in the addition of any water to the surface water source during the relevant time period.

dive into this... water elevations?
distance? how is this evaluated,
especially with the confined criteria and
distances removed?

(5) "Director" means the W

(36) "Hydraulic Connection" or "Hydraulic Interconnection" means saturated conditions exist that allow water to move between two or more sources of water, either between groundwater and surface water or between groundwater sources. ~~means that water can move between a surface water source and an adjacent aquifer.~~

(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.

(5) "Proposed groundwater use" means an application to appropriate groundwater pursuant to ORS 537.621 that is under consideration with the Department.

(6) "Streamflow depletion" means a reduction in the flow of a surface water source due to pumping a hydraulically connected groundwater source. Streamflow depletion encompasses both:

(a) captured groundwater that would otherwise discharge to a surface water source; and,

(b) induced infiltration from a surface water source to recharge the hydraulically connected groundwater source.

(7) "Unconfined Aquifer" means an aquifer in which the hydrostatic head at the upper surface of the ground water is atmospheric.

Statutory/Other Authority: ORS 537

History:

WRD 17-1988, f. & cert. ef. 11-4-88

~~690-009-0030~~

~~General Policy~~

~~The following rules establish criteria to guide the Department in making determinations whether wells have the potential to cause substantial interference with surface water supplies and in controlling such interference. The rules apply to all wells, as defined in ORS 537.515 (7), and to all existing and proposed appropriations of ground water except the exempt uses under 537.545. The authority under these rules may be locally superseded where more specific direction is provided by the Commission after the effective date of adoption of these rules.~~

~~Statutory/Other Authority: ORS 537~~

~~History:~~

~~WRD 17-1988, f. & cert. ef. 11-4-88~~

690-009-0040

Determination of Hydraulic Connection and Potential for Substantial Interference

(1) Hydraulic connection and the potential for substantial interference with a surface water source shall be determined by the Department according to these rules. These determinations shall be based upon the application of generally accepted hydrogeologic principals using best available information concerning the hydrologic system of interest and the well(s) under consideration.

(a) Any information that is provided by potentially affected parties shall be considered in the process of making these determinations.

(b) Best available information includes, but is not limited to, pertinent water well reports, aquifer test analyses, hydrologic and geologic studies and reports, groundwater and surface water elevation data, available numerical and analytical groundwater flow models, and any other information that is used in applying generally accepted hydrogeologic principals and methodologies.

(2) A determination of hydraulic connection is a prerequisite for a determination of the potential for substantial interference.

(3) A determination of the potential for substantial interference with a surface water source shall at a minimum include application of the generally accepted hydrogeological principles described in the following subsections to the specific use and wells under consideration:

(a) "The Source of Water Derived from Wells: Essential Factors Controlling the Response of an Aquifer to Development" by C. V. Theis, 1940; and,

annually, or forever?

(b) "Streamflow Depletion by Wells – Understanding and Managing the Effects of Groundwater Pumping on Streamflow" by P. M. Barlow and S. A. Leake, 2012.

define?

(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.

any measurable?

(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, OAR 690-300-0010, and OAR 690-400-0010.

(6) For the purposes of groundwater controls in OAR 690-009-0050, a finding of potential for substantial interference with a surface water source may precede the control actions described in that rule.

For the purposes of permitting and distributing ground water, the potential for substantial interference with surface water supplies shall be determined by the Department.

(1) The Department shall determine whether wells produce water from an unconfined or confined aquifer. Except for wells that satisfy the conditions in section (2) of this rule the Department shall further determine whether the aquifer is hydraulically connected to the surface water source. The basis of the determination shall be information provided on the Water Well Report for any well in question. If there is no Water Well Report available or if the information provided is inadequate, the Department shall make the determination on the basis of the best available information. Such information may

include other Water Well Reports, topographic maps, hydrogeologic maps or reports, water level and other pertinent data collected during a field inspection, or any other available data or information that is appropriate, including any that is provided by potentially affected parties.

(2) All wells located a horizontal distance less than one-fourth mile from ~~any~~ no longer part of the eval? that produce water from an unconfined aquifer shall be assumed to be hydraulically connected to the surface water source, unless the applicant or appropriator provides satisfactory information or demonstration to the contrary. Department staff may provide reasonable assistance to the applicant or appropriator in acquiring the satisfactory information.

(3) The Department shall determine the horizontal distance between any well in question and the nearest surface water source on the basis of the edge of the surface water source as also determined by the Department.

(4) All wells that produce water from an aquifer that is determined to be hydraulically connected to a surface water source shall be assumed to have the potential to cause substantial interference with the surface water source if the existing or proposed ground water appropriation is within one of the following categories:

(a) The point of appropriation is a horizontal distance less than one-fourth mile from the surface water source; or

(b) The rate of appropriation is greater than five cubic feet per second, if the point of appropriation is a horizontal distance less than one mile from the surface water source; or

(c) The rate of appropriation is greater than one percent of the pertinent adopted minimum perennial streamflow or instream water right with a senior priority date, if one is applicable, or of the discharge that is equaled or exceeded 80 percent of time, as determined or estimated by the Department, and if the point of appropriation is a horizontal distance less than one mile from the surface water source; or

(d) The ground water appropriation, if continued for a period of 30 days, would result in stream depletion greater than 25 percent of the rate of appropriation, if the point of appropriation is a horizontal distance less than one mile from the surface water source. Using the best available information, stream depletion shall be determined or estimated by the Department, employing at least one of the following methods:

(A) Suitable equations and graphical techniques that are described in pertinent publications (such as "Computation of Rate and Volume of Stream Depletion by Wells," by C.T. Jenkins, in Techniques of Water Resources Investigations of the United States Geological Survey: Book 4, Chapter D1);

(B) A computer program or ground water model that is based on such or similar equations or techniques.

(5) Any wells, other than those covered in section (4) of this rule, that produce water from an aquifer that is determined to be hydraulically connected to the surface water source may be determined by the Department to have the potential to cause substantial interference with the surface water source. In making this determination, the Department shall consider at least the following factors:

- ~~(a) The potential for a reduction in streamflow or surface water supply; or~~
- ~~(b) The potential to impair or detrimentally affect the public interest as expressed by an applicable closure on surface water appropriation, minimum perennial streamflow, or instream water right with a senior priority date; or~~
- ~~(c) The percentage of the ground water appropriation that was, or would have become, surface water; or~~
- ~~(d) Whether the potential interference would be immediate or delayed; or~~
- ~~(e) The potential for a cumulative adverse impact on streamflow or surface water supply.~~
- ~~(6) All wells that produce water from an aquifer that is not hydraulically connected to a surface water source shall be assumed not to interfere with the surface water source.~~

~~[Publications: Publications referenced are available from the agency.]~~

Statutory/Other Authority: ORS 537

History:

WRD 17-1988, f. & cert. ef. 11-4-88

690-009-0050

Ground Water Controls

These rules apply to the control or regulation of groundwater where it is determined that an existing groundwater appropriation will cause or has caused substantial or undue interference with a surface water source as described in OAR 690-009-0040.

(1) The Department shall review existing ground water appropriations to determine the potential to cause substantial interference with a surface water source on a case-by-case basis, in accordance with OAR 690-009-0040, whenever the Department has cause to believe that substantial interference with a surface water source ~~is suspected to exist by the Department~~may exist.

(2) Whenever the Department determines that substantial interference with a surface water supply exists, the Department shall control those groundwater appropriations that have been determined under section (1) of this rule to have the potential to cause substantial interference. The controls shall be similar to or compatible with, but not more restrictive than controls on the affected surface water source, in accordance with the relative dates of priorities of the ground water and surface water appropriations:

(a) Prior to controlling the use of any well greater than 500 feet from a surface water source, the Department shall determine whether any control would provide relief to the surface water supply in an effective and timely manner. The Department shall make the determination on the basis of the best available information, employing at least one of the following methods: ~~set forth in OAR 690-009-0040(4)(d);~~

(A) Suitable equations and graphical techniques that are described in pertinent publications (such as "Computation of Rate and Volume of Stream Depletion by Wells," by C.T. Jenkins, in Techniques of Water-Resources Investigations of the United States Geological Survey: Book 4, Chapter D1);

(B) A computer program or ground water model that is based on such or similar equations or techniques

(b) The Department shall control the use of wells greater than one mile from a surface water source only through a critical ground water area determination in accordance with ORS 537.730 through 537.740.

(3) As necessary, the Department shall determine the horizontal distance between any well in question and the nearest surface water source on the basis of the edge of the surface water source as also determined by the Department.

Statutory/Other Authority: ORS 537

History:

WRD 17-1988, f. & cert. ef. 11-4-88



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HARTT Laura A * WRD

From: IVERSON Justin T * WRD
Sent: Monday, April 24, 2023 8:08 AM
To: HARTT Laura A * WRD; LIEBE Annette I * WRD
Subject: Div 400 over-approp def. and water budgets

FYI on com with Zach Freed re his comment on keeping water budget language in Div 400. Punchline is that he's fine leaving it out; ("I'm good with where we landed on removing the pseudo-water-budget text from the rule,").

Thanks,

[Justin Iverson, RG](#)

GROUNDWATER SECTION MANAGER

Oregon Water Resources Department

Cell: 503-302-9728 Justin.T.Iverson@water.oregon.gov

Pronouns: He/Him

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From: IVERSON Justin T * WRD
Sent: Monday, April 24, 2023 8:03 AM
To: Zach Freed <zach.freed@TNC.ORG>
Subject: RE: The water budget myth - revisited

And just in case we don't get to talk before you find yourself in water budget conversations with Harmony, Mark, or others. Yes, I whole-heartedly agree that water budgets are useful. And the HB2018 work is very worthwhile, as it'll give us a 2-year head start (plus or minus) on every future groundwater basin study we conduct.

However, in the context of allocation, the budgets are rarely at a scale that is useful for assessing over-appropriation, primarily due to the fact that a water budget is evenly distributed across the full area circumscribed by the boundaries of the budget, but subsurface heterogeneity and surface ownership/development are variable on a much smaller scale, such that both groundwater availability and pumping impacts are often concentrated in small areas within a water budget area. So we see wl declines in the Redmond area even though the Deschutes Basin receives much more recharge than has been allocated to gw extraction. And we get the Western/Silver Creek region of the Harney Basin water budget as not over-appropriated (just barely, but still, rules are black and white) and that area contains Weaver Springs.

Happy to chat further about the nuances. And how we may find a common communication tool that better describes gw systems. Or maybe we just need to make the bank account metaphor more complex...

Cheers,

[Justin Iverson, RG](#)

GROUNDWATER SECTION MANAGER

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From: Zach Freed <zach.freed@TNC.ORG>
Sent: Saturday, April 22, 2023 12:01 AM
To: IVERSON Justin T * WRD <Justin.T.IVERSON@water.oregon.gov>
Subject: Re: The water budget myth - revisited

Sadly I'm out of country for the first div 512 meeting. I plan to be in Burns for all of the following ones, though. Kelly helpfully said he'd send me the recording of next week's chat.

Hope y'all have fun. Save some of the juicy stuff for future meetings, will you?

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From: IVERSON Justin T * WRD <Justin.T.IVERSON@water.oregon.gov>
Sent: Friday, April 21, 2023, 5:04 PM
To: Zach Freed <zach.freed@TNC.ORG>
Subject: RE: The water budget myth - revisited

Thanks Zach.

Will you be in person in Burns for the Div 512 RAC meeting next Tuesday? If so let's chat then. If not, I'll reach back out to set up a time for a call.

Cheers,

[Justin Iverson, RG](#)
GROUNDWATER SECTION MANAGER
Oregon Water Resources Department
Cell: 503-302-9728 Justin.T.Iverson@water.oregon.gov
Pronouns: He/Him

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From: Zach Freed <zach.freed@TNC.ORG>
Sent: Wednesday, April 19, 2023 4:40 PM
To: IVERSON Justin T * WRD <Justin.T.IVERSON@water.oregon.gov>
Subject: RE: The water budget myth - revisited

Hey Justin,

Great job on the presentation(s) today and on handling all of the questions. Thanks for the link—I remember you had sent me this paper before when I pestered you about water budgets in the past. It was worth the re-read, though. There's a ton of really insightful stuff in that short article, and I *definitely* don't pretend to know more about groundwater than Bredehoeft of all people.

That said, my hot take is that his paper busts the "virgin rate of recharge dictates the maximum amount of pumping" myth more than it busts the "water budgets are useful" myth. It would be great to grab a beer and discuss this article (and the examples within) at some point...but in the meantime, I'm good with where we landed on removing the pseudo-water-budget text from the rule, and I appreciate the follow-up. I know you've thought through the proposed rules pretty carefully.

Thanks for the myth-busting and I'm looking forward to continuing the conversation.

Cheers,
Zach

Zach Freed | Oregon Water Strategy Director
The Nature Conservancy
503-802-8151 | zach.freed@tnc.org

From: IVERSON Justin T * WRD <Justin.T.IVERSON@water.oregon.gov>
Sent: Wednesday, April 19, 2023 11:48 AM
To: Zach Freed <zach.freed@TNC.ORG>
Subject: FW: The water budget myth - revisited

Hi Zach!

Please see link below as a (relatively succinct) summary of why I'd propose dropping the water budget. Understand your point aligns with the precautionary principal. But, I hate perpetuating myths...

Happy to discuss.

Cheers,

[Justin Iverson, RG](#)

GROUNDWATER SECTION MANAGER

Oregon Water Resources Department

Cell: 503-302-9728 Justin.T.Iverson@water.oregon.gov

Pronouns: He/Him

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From: IVERSON Justin T * WRD
Sent: Wednesday, November 2, 2022 2:32 PM
To: LIEBE Annette I * WRD <Annette.I.LIEBE@water.oregon.gov>; HUDSON Bryn * WRD <Bryn.HUDSON@water.oregon.gov>; RANCIER Racquel R * WRD <Racquel.R.RANCIER@water.oregon.gov>
Cc: GALL Ivan K * WRD <Ivan.K.GALL@water.oregon.gov>
Subject: The water budget myth - revisited

https://aquadoc.typepad.com/files/bredehoeft_gw_2002.pdf

I was reminded of this (IMO succinct and spot-on) issue paper today. I share it relatively often, and I have shared it with Rep Owens and Harmony in the past. I've tried to make this point in the gw public outreach meetings, and my concept of the GW Allocation Project rule changes follows with these ideas. That said, maybe hearing (reading) it from a recognized authority on the matter could be helpful. Or maybe passing it on at some point could be helpful. I'd suggest skipping the science-y stuff, and reading the following sections that amount to about a page of text:

- Abstract
- Introduction
- Water Law in the West (starting at the bottom of page 342)
- Conclusion

Feel free to read more. I'm happy to answer any questions that may arise.

Cheers,

[Justin Iverson, RG](#)

GROUNDWATER SECTION MANAGER

Oregon Water Resources Department
Cell: 503-302-9728 Justin.T.Iverson@water.oregon.gov
Pronouns: He/Him

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We're hiring! See the current list of jobs [here](#). Search for "groundwater".

HARTT Laura A * WRD

From: phggeek at bctonline.com <phggeek@bctonline.com>
Sent: Wednesday, April 26, 2023 4:44 PM
To: HARTT Laura A * WRD
Subject: Questions/Comments for Discussion, GW Allocation RAC

Laura,

Here are a few comments/questions I would like to submit for discussion at our next meeting based on what we covered during the April 19 meeting.

During that meeting, I commented on the implications of the proposed changes to the definition for “Over-Appropriated” in the Division 300 rules. Specifically, OAR 690-400-0010(11)(b), as proposed, says that any groundwater source that is hydraulically connected to a surface water source that is already over-appropriated as defined in OAR-009-0020 will be determined to be over-appropriated.

Given that the vast majority of groundwater sources would likely meet the Department’s proposed new definition of hydraulic connection to a surface water source according to OAR-009-0020 (i.e., movement of water in any amount, somewhere, over an infinite period of time), and given that the vast majority of surface water sources in the State meet the OAR-009-0020 definition of “Over-Appropriated,” it seems that adoption of 690-400-0010(11)(b) will, by itself, result in the issuance of very few, if any, new groundwater permits.

So, with the foregoing serving as the context of this question, I would like the Department to provide this committee with a list of possible scenarios or conditions under which they believe new groundwater permits could be approved.

I would also like to know how adoption of the new Division 300 definition of “Over-Appropriated” will affect the ability to get a permit to pump groundwater in winter, during periods when nearby surface water sources are not over-appropriated.

Can we also have some further discussion about how these new proposed rules will affect the ability to develop Managed Aquifer Recharge projects?

Regards,

Greg Kupillas
Pacific Hydro-Geology Inc.

HARTT Laura A * WRD

From: IVERSON Justin T * WRD
Sent: Friday, April 21, 2023 5:12 PM
To: Siler, Nicholas
Cc: LIEBE Annette I * WRD; HARTT Laura A * WRD; SCANDELLA Benjamin P * WRD
Subject: RE: Definition of "reasonably stable"

Hi Nick,

Thanks for your message!

FYI, we're currently thinking about these same questions, and as we pull together the informational slide show with examples of how the rule definition would apply to example hydrographs we find ourselves modifying the details of the definition. So I expect the definition will look a little different when we send out the next RAC packet, which I believe will happen about a week ahead of the May 10 meeting.

Also, we'd really appreciate your input during the discussion on the 10th, especially with respect to the best current predictions about how decadal climate variability may look different in the future and how climate change in general is expected to manifest in Oregon.

Look forward to more good discussion.

Regards,

Justin Iverson, RG

GROUNDWATER SECTION MANAGER

Oregon Water Resources Department

Cell: 503-302-9728 Justin.T.Iverson@water.oregon.gov

Pronouns: He/Him

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We're hiring [Senior Hydrogeologists](#)! See the full list of OWRD recruitments [here](#). Search for "owrd".

From: HARTT Laura A * WRD <Laura.A.HARTT@water.oregon.gov>
Sent: Wednesday, April 19, 2023 1:37 PM
To: Siler, Nicholas <nick.siler@oregonstate.edu>
Cc: IVERSON Justin T * WRD <Justin.T.IVERSON@water.oregon.gov>; LIEBE Annette I * WRD <Annette.I.LIEBE@water.oregon.gov>
Subject: RE: Definition of "reasonably stable"

Thank you for your comment/question and for joining us. ! I'm copying Justin and Annette on here, so we can be sure to visit your question at our next RAC meeting.

Enjoy the rest of your afternoon! Laura

From: Siler, Nicholas <nick.siler@oregonstate.edu>
Sent: Wednesday, April 19, 2023 12:06 PM
To: HARTT Laura A * WRD <Laura.A.HARTT@water.oregon.gov>
Subject: Definition of "reasonably stable"

Hi Laura,

I thought you and Justin did a great job keeping the meeting on track.

I'm a climate scientist, not a hydrogeologist, so I don't have a lot to contribute at this stage. My only real question relates to the definition of "reasonably stable", which we'll likely discuss in more detail on May 10. In particular, I'd like to hear more about what "stable" means in the context of decadal climate variability and climate change. What happens if new water rights are granted during a period in which aquifer levels appear stable, but then 20 years down the road there's less water available, either due to natural variability or climate change?

Best,

Nick

From: HARTT Laura A * WRD <Laura.A.HARTT@water.oregon.gov>
Date: Tuesday, March 28, 2023 at 12:31 PM
To: Siler, Nicholas <nick.siler@oregonstate.edu>
Cc: LIEBE Annette I * WRD <Annette.I.LIEBE@water.oregon.gov>, O Neill, Larry William <larry.oneill@oregonstate.edu>
Subject: RE: Groundwater Allocation Rules Advisory Committee (RAC) - expertise sought

[This email originated from outside of OSU. Use caution with links and attachments.]

That's fine. We can work with that and if you want to use a proxy for that last meeting, that's ok, too.

Thanks so much! More information to follow shortly...Laura

From: Siler, Nicholas <nick.siler@oregonstate.edu>
Sent: Tuesday, March 28, 2023 12:22 PM
To: HARTT Laura A * WRD <Laura.A.HARTT@water.oregon.gov>
Cc: LIEBE Annette I * WRD <Annette.I.LIEBE@water.oregon.gov>; O Neill, Larry William <larry.oneill@oregonstate.edu>
Subject: Re: Groundwater Allocation Rules Advisory Committee (RAC) - expertise sought

Hi Laura,

Happy to do it but I won't be able to make the last meeting on June 21--I'll be on a flight home from Chicago that day.

-Nick

On Mar 28, 2023, at 11:48 AM, HARTT Laura A * WRD <Laura.A.HARTT@water.oregon.gov> wrote:

[This email originated from outside of OSU. Use caution with links and attachments.]

Hi Nick,

I wanted to check in one more time to see if you are available for our Groundwater Allocation Rules Advisory Committee (please see below) or might have a suggestion for another climate/drought expert?

Thanks for your time! Laura

From: HARTT Laura A * WRD
Sent: Tuesday, March 21, 2023 6:30 PM
To: nick.siler@oregonstate.edu

Cc: LIEBE Annette I * WRD <Annette.I.LIEBE@water.oregon.gov>

Subject: Groundwater Allocation Rules Advisory Committee (RAC) - expertise sought

Hi Nick,

I hope you are well. I received your name from Larry O'Neill. As a quick introduction, I am one of the rules writers with Oregon Water Resources Department. We have begun our rulemaking effort to update our groundwater allocation process. Part of that process includes formation of a Rules Advisory Committee (RAC) to help provide input on our draft rules as well as the economic and fiscal impacts of those rules. We are putting together a roster of approximately 30-35 individuals representing various geographies and user interests. We also are seeking experts in disciplines that are pertinent to our rulemaking, including hydrology, climate, water rights, water justice, and economics, to name a few. We think you might be a good fit for this effort, given your expertise in climate change and hydrology.

Please see the original email invitation below, which has more details. If you are willing and able to join us, please do let me know.

Thanks! Laura

[*Laura Hartt \(she/her/hers\)*](#)

Water Policy Analyst

725 Summer St NE Suite A | Salem OR 97301 | Phone 971-720-0963 | Laura.A.Hartt@water.oregon.gov

<image002.jpg>

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From: HARTT Laura A * WRD

Sent: Tuesday, March 7, 2023 8:51 AM

Subject: Groundwater Allocation Rules Advisory Committee (RAC) - interest/availability

Greetings,

We are gearing up for the groundwater allocation rulemaking process. You have been identified you as someone who has either expressed interest in serving on the Rules Advisory Committee (RAC) or as someone who may be impacted by the rulemaking. We extend this invitation to you to participate on the RAC.

Rulemaking purpose: The rules will revise the process for making decisions about new groundwater permits/water right requests. Rule revisions will implement direction from the Water Resources Commission that the Department modernize groundwater allocation policy to be more sustainable and protective of existing water right holders, both surface and groundwater.

RAC Timeline: The Department plans to hold 4-5 Rules Advisory Committee (RAC) meetings, beginning in April, with the goal of presenting the final draft rules to the Commission for adoption by November 2023. The RAC meetings will be approximately 3-4 hours each, depending on the agenda. These meetings will be hybrid, offering both an online (Zoom) and an in-person (Salem) option for attendees. We have selected **April 19 (8:30 am -noon), May 10 (8:30-noon), May 31 (8:30-noon), and June 21 (830 am-noon)**, to convene, with a fifth meeting to be determined as needed.

Please feel free to reach out to me (Laura.A.Hartt@water.oregon.gov or 971-720-0963) if you have any questions about this invitation or the rulemaking in general.

You can find more information about this and other rulemaking efforts on our website: [OWRD Proposed Rulemaking](#).

Thank you! Laura

[Laura Hartt](#) (she/her/hers)

Water Policy Analyst

725 Summer St NE Suite A | Salem OR 97301 | Phone 971-720-0963 | Laura.A.Hartt@water.oregon.gov

<image003.jpg>

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HARTT Laura A * WRD

From: Tammy Wood <tammy3370@gmail.com>
Sent: Wednesday, April 26, 2023 1:20 PM
To: HARTT Laura A * WRD
Subject: GW Allocation RAC comments after meeting 1

Hi Laura,

I have 2 general comments after the first meeting of the GW Allocation RAC, and will point specifically to 2 relevant places in the proposed rules.

Comment number 1: As clearly stated in slide 14 of Justin's presentation, when groundwater is pumped, it either comes from storage or from stream capture (or induced recharge, but this is rare). The rules should, therefore, acknowledge this reality and the establishment of hydraulic connection to a SW feature should be taken as evidence that stream capture will occur. Soon after pumping the contribution from stream capture is a small fraction of that taken from storage, but at steady-state all pumping comes from stream capture (slide 20). The job of the Department then, in assessing permit applications, is not to determine **if** stream capture occurs, but rather the significance of the stream capture that **will** occur, with respect to the SW feature (note that I prefer the language SW "feature" to SW source, which would be defined to include all of streams, lakes and wetlands). With this comment in mind, I would re-write the definition of PSI in Div 9 rules to be:

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

Comment number 2: It's important that the new rules not perpetuate the "misconceptions" (word used in Barlow and Leake 2012) that 1) groundwater development is sustainable if it does not exceed the recharge to the aquifer, and 2) the amount of streamflow depletion caused by pumping is influenced by the flow through the aquifer. With that in mind, I agree with the removal of the reference to aquifer recharge and inclusion of the hydraulic connection criterion in the definition of "over-appropriated" found in div 400 (11) (slide 56 in Justin's presentation). I don't agree with the suggestion that both criteria be kept in the definition, because aquifer recharge is not a valid way to evaluate sustainable groundwater development, and keeping that language would perpetuate the misconceptions above.

Tammy Wood

HARTT Laura A * WRD

From: Dave Wildman <dwildman@andersonperry.com>
Sent: Wednesday, April 26, 2023 2:55 PM
To: HARTT Laura A * WRD
Subject: RE: Thank you/Resources for Groundwater Allocation RAC members

Laura,

There were two items from our first rules advisory committee that I wanted to comment on. Let me know if I need to submit this in another fashion, but I will note my potential concerns below.

1. As it relates our discussions related to the revisions in Section 400 and Division 8, I did not see a clear definition for “reasonably stable” groundwater levels. I think this need to be more clearly defined in the rules. It seems like a lot of judgement is left to the groundwater permit application reviewer in interpreting this and the criteria could vary depending on the reviewer assigned to the application.
2. It was noted that the hydrogeologist assigned to review the groundwater permit application will determine what the impact to surface water or the overall stability of the aquifer would be. It seems like a process should be defined that if the applicant does not agree with the hydrogeologists analysis, they would have the ability to provide supplemental information potentially clarifying and/or contradicting the hydrogeologists perspective. If an agreement cannot be made between the parties, it seems like a meeting between the applicant and OWRD staff would be called to clarify the differences in perspective and come up with hopefully an amenable solution, similar to a “jury of your peers” in our state and federal legal processes. My concern is that the current process of having one hydrogeologist determine the fate of an application seems very unusual and could lead to “abuses of power.”

Thank you in advance of your consideration of these comments and please let me know if I need to submit these comments using another format.

Dave Wildman

From: HARTT Laura A * WRD <Laura.A.HARTT@water.oregon.gov>
Sent: Thursday, April 20, 2023 1:46 PM
Subject: Thank you/Resources for Groundwater Allocation RAC members

Good afternoon RAC members,

I thank you again for attending yesterday’s meeting. I think we generated some good discussion and look forward to our next meeting, scheduled for May 10, 8:30 am – noon. It will be hybrid again. Agenda, other pre-meeting materials, and meeting logistics to follow soon. Here is the registration link: [Zoom Registration](#), for those who wish to register early. I will resend out this link along with instructions for joining us in person when I send out the materials for our next meeting.

We had some requests for additional information during our meeting, which I am now providing. Our rulemaking website, where we upload all RAC-related meeting materials is here: [Groundwater Allocation Rulemaking](#). The scientific references cited during the presentation are available in the first pull down (just click the “+” symbol), labeled “Rule Information and Background.” You can find hyperlinks that will take you directly to the various documents.

Our pre-meeting materials for yesterday’s meeting are available in the second pull down, labeled “Rule Advisory Committee Meeting 1 – April 19, 2023.”

The report summarizing input received during our public outreach meetings last fall are available in second from the bottom pull down, labeled “Public Engagement, Hearings and Comments,” and is listed as “Outreach Meetings Summary Report.” You also can download it directly using this link: [Outreach Meetings Summary Report](#). This file is rather large, so please give it a minute or two to download.

Also, just a quick reminder...we ask that you provide any feedback you might have by Wednesday, April 26, COB, so we can incorporate that feedback into our pre-meeting materials which we plan to send out a week in advance of our next RAC meeting.

Thanks again everyone for a great meeting! Laura

[Laura Hartt](#) (*she/her/hers*)

Water Policy Analyst

725 Summer St NE Suite A | Salem OR 97301 | Phone 971-720-0963 | Laura.A.Hartt@water.oregon.gov



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HARTT Laura A * WRD

From: Kelly Warren <KellyWarren@ctuir.org>
Sent: Thursday, May 4, 2023 10:15 AM
To: HARTT Laura A * WRD
Subject: RE: Second Groundwater Allocation Rulemaking Meeting (Wed, 5/10/23, 8:30 am - noon)

Laura:

Thank you for providing the materials to prepare for next week's meeting.

In review of materials provided to date, I noted that the document "OWRD RAC General Operation Principals" that informs Committee Members of their duties and responsibilities had not been provided to this committee. I also did not see it online.

I found this a useful guide when serving on my first RAC (Rule 10) as it provided the expectations and responsibilities of serving as a Committee Member.

I hope you agree and will include this document with the next delivery of review materials.

Your efforts are appreciated.

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From: HARTT Laura A * WRD [mailto:Laura.A.HARTT@water.oregon.gov]
Sent: Wednesday, May 3, 2023 11:35 PM
Subject: Second Groundwater Allocation Rulemaking Meeting (Wed, 5/10/23, 8:30 am - noon)

EXTERNAL EMAIL: Please use caution when clicking links or opening attachments.

Good evening, RAC members!

We are preparing for our second meeting next week, Wednesday, May 10, from 8:30 am to noon. The meeting will be hybrid, held in our Salem office as well as on Zoom (details for joining us below). I will also send this information out as an appointment for those of you who prefer to use calendar invites.

Please find attached the following pre-meeting materials (7 documents total):

- GW Allocation RAC Meeting 2 Agenda
- GW Allocation RAC Meeting 2 Presentation
- Updated (051023) Draft Proposed Rules with Track Changes—3 separate documents for Divisions 8, 300, and 400
- GW Allocation RAC 1 Draft Meeting Summary
- GW Allocation RAC Meeting 1 Comments Received (compiled)

All meeting materials as well as other background materials will be posted on our Proposed Rulemaking for Groundwater Allocation website, which you can visit here:

<https://www.oregon.gov/owrd/programs/GWWL/GW/Pages/Groundwater-Rulemaking.aspx>.

Please note that the attached are the full set of the most current meeting documents. Because this is an iterative process, materials are subject to change. However, I will do my best to make sure you have the most up-to-date documents from which to work going into each meeting. All meetings are open to the public and are recorded.

Meeting Logistics

On Wednesday, May 10, from 8:30 am to noon, we will be meeting in the Rogue Conference room on the 3rd floor at our Salem office (725 Summer St NE, Salem) as well as via Zoom. We will begin in-person registration at 8:00 am (there are rumors circulating that coffee and baked goods may be provided). For access to the third floor, please check in at the main OWRD office on the first floor. I will have signs posted to direct you accordingly.

Please scroll down to the bottom of this email for Google driving directions and parking instructions.

For those joining us virtually, we will begin registration at 8:15 am. To join us by Zoom, please register here: [Zoom Registration](#)

If you cannot make next week's meeting (either in person or via Zoom), please contact me (laura.a.hartt@water.oregon.gov) to let me know. You may send a proxy in your place, but please notify me at least 24 hours in advance (laura.a.hartt@water.oregon.gov) and please limit use of a proxy to one meeting, if possible.

For Driving Directions, click here: [Google Driving Directions](#)

Parking Instructions

- Parking is located along Summer Street (metered) and Winter Street (metered and 90-minute parking).
- There are six 2-hour parking stalls located between the North Mall Office Building (NMOB) and the Employment Building to the south.
- Parking is also available in the Yellow Lot which is located two blocks south of the NMOB. Please note there is a fee to park in the Yellow Lot.
- We do have parking passes that cover the daily cost of parking in the Yellow Lot. Those passes are physical tickets that cannot be emailed out ahead of time. We will bring them to our meeting next week to hand out to RAC members in preparation for our May 10 meeting. If you would like a parking pass for this meeting, logistically you would need to park legally (which means paying at a meter for a short period time) somewhere nearby to retrieve the pass prior to moving your vehicle to the Yellow Lot. Please email me no later than noon, April 18th, if you intend to pick up a pass prior to our April 19th meeting.

Navigation Tip: OWRD/NMOB Building Access is easiest along Winter Street (just north of Union Street NE).

Thank you all for your continued involvement in this very important rulemaking process! Laura

[Laura Hartt \(she/her/hers\)](#)

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