

OFFICE OF THE SECRETARY OF STATE

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ARCHIVES DIVISION

STEPHANIE CLARK
DIRECTOR

800 SUMMER STREET NE
SALEM, OR 97310
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NOTICE OF PROPOSED RULEMAKING
INCLUDING STATEMENT OF NEED & FISCAL IMPACT

CHAPTER 690
WATER RESOURCES DEPARTMENT

FILED

02/22/2024 6:03 PM
ARCHIVES DIVISION
SECRETARY OF STATE

FILING CAPTION: Amend, repeal, and adopt rules pertaining to allocation of new groundwater rights.

LAST DAY AND TIME TO OFFER COMMENT TO AGENCY: 05/31/2024 5:00 PM

The Agency requests public comment on whether other options should be considered for achieving the rule's substantive goals while reducing negative economic impact of the rule on business.

CONTACT: Laura Hartt
971-720-0963
laura.a.hartt@water.oregon.gov

Oregon Water Resources Department
725 Summer St NE, Ste A
Salem, OR 97301

Filed By:
Laura Hartt
Rules Coordinator

HEARING(S)

Auxiliary aids for persons with disabilities are available upon advance request. Notify the contact listed above.

DATE: 04/04/2024

TIME: 7:00 PM - 9:00 PM

OFFICER: Laura Hartt

IN-PERSON HEARING DETAILS

ADDRESS: Deschutes Service Building, 1300 NW Wall Street, Bend, OR 97703

SPECIAL INSTRUCTIONS:

This hearing will be conducted in-person. Each person attending the hearing who wishes to comment will be asked to sign in on a sign-up sheet upon arrival. During the hearing, the hearing officer will call on members of the public to provide oral comment in the order in which attendees have registered to comment. The hearing will begin no earlier than 7:00 p.m. and close no later than 9:00 p.m. Based on the number of people who have signed up to provide oral comments, the hearing officer may set reasonable time limits for each commenter.

The hearing session will be recorded and available for viewing within 48 hours of the close of the hearing on the rulemaking website: <https://www.oregon.gov/owrd/programs/GWWL/GW/Pages/Groundwater-Rulemaking.aspx>.

Auxiliary aids for persons with disabilities are available upon advance request. Please email WRD_DL_rule-coordinator@water.oregon.gov or call (971) 720-0963 as soon as possible, but at least 48 hours in advance of the hearing for which an aid is needed.

In addition to presenting oral comments at the hearing, anyone may submit written comments until 5 P.M. on May 31, 2024, which is the close of the public comment period. Written comments should be sent to "Laura Hartt" at Oregon Water Resources Department, 725 Summer Street NE, Suite A, Salem, OR 97301 or by email to WRD_DL_rule-coordinator@water.oregon.gov.

Comments received after 5 P.M. on May 31, 2024, will not be reviewed or considered by the agency unless the agency

decides to extend the public comment period for everyone.

DATE: 04/18/2024

TIME: 7:00 PM - 9:00 PM

OFFICER: Laura Hartt

IN-PERSON HEARING DETAILS

ADDRESS: Eastern Oregon University, One University Blvd., Hoke Student Union Building, Room 339, La Grande, OR 97850

SPECIAL INSTRUCTIONS:

This hearing will be conducted in-person. Each person attending the hearing who wishes to comment will be asked to sign in on a sign-up sheet upon arrival. During the hearing, the hearing officer will call on members of the public to provide oral comment in the order in which attendees have registered to comment. The hearing will begin no earlier than 7:00 p.m. and close no later than 9:00 p.m. Based on the number of people who have signed up to provide oral comments, the hearing officer may set reasonable time limits for each commenter.

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Comments received after 5 P.M. on May 31, 2024, will not be reviewed or considered by the agency unless the agency decides to extend the public comment period for everyone.

DATE: 05/16/2024

TIME: 7:00 PM - 9:00 PM

OFFICER: Laura Hartt

IN-PERSON HEARING DETAILS

ADDRESS: Jackson County Auditorium, 7520 Table Rock Rd., Central Point, OR 97502

SPECIAL INSTRUCTIONS:

This hearing will be conducted in-person. Each person attending the hearing who wishes to comment will be asked to sign in on a sign-up sheet upon arrival. During the hearing, the hearing officer will call on members of the public to provide oral comment in the order in which attendees have registered to comment. The hearing will begin no earlier than 7:00 p.m. and close no later than 9:00 p.m. Based on the number of people who have signed up to provide oral comments, the hearing officer may set reasonable time limits for each commenter.

The hearing session will be recorded and available for viewing within 48 hours of the close of the hearing on the rulemaking website: <https://www.oregon.gov/owrd/programs/GWWL/GW/Pages/Groundwater-Rulemaking.aspx>.

Auxiliary aids for persons with disabilities are available upon advance request. Please email WRD_DL_rule-coordinator@water.oregon.gov or call (971) 720-0963 as soon as possible, but at least 48 hours in advance of the hearing for which an aid is needed.

In addition to presenting oral comments at the hearing, anyone may submit written comments until 5 P.M. on May 31, 2024, which is the close of the public comment period. Written comments should be sent to "Laura Hartt" at Oregon Water Resources Department, 725 Summer Street NE, Suite A, Salem, OR 97301 or by email to WRD_DL_rule-coordinator@water.oregon.gov.

Comments received after 5 P.M. on May 31, 2024, will not be reviewed or considered by the agency unless the agency decides to extend the public comment period for everyone.

DATE: 05/21/2024

TIME: 7:00 PM - 9:00 PM

OFFICER: Laura Hartt

IN-PERSON HEARING DETAILS

ADDRESS: North Mall Office Building, 725 Summer Street NE, Room 124, Salem, OR 97301

SPECIAL INSTRUCTIONS:

This hearing will be conducted as a hybrid meeting, providing an opportunity to give testimony either in person, virtually, or by phone. Each person attending the hearing in person who wishes to comment will be asked to sign in on a sign-up sheet upon arrival. During the hearing, the hearing officer will alternate between those commenting in person, virtually, and by phone, proceeding in the order in which attendees have registered to comment. The hearing will begin no earlier than 7:00 p.m. and close no later than 9:00 p.m. Based on the number of people who have signed up to provide oral comments, the hearing officer may set reasonable time limits for each commenter.

The hearing session will be recorded and available for viewing within 48 hours of the close of the hearing on the rulemaking website: <https://www.oregon.gov/owrd/programs/GWWL/GW/Pages/Groundwater-Rulemaking.aspx>.

Auxiliary aids for persons with disabilities are available upon advance request. Please email WRD_DL_rule-coordinator@water.oregon.gov or call (971) 720-0963 as soon as possible, but at least 48 hours in advance of the hearing for which an aid is needed.

In addition to presenting oral comments at the hearings, anyone may submit written comments until 5 P.M. on May 31, 2024, which is the close of the public comment period. Written comments should be sent to "Laura Hartt" at Oregon Water Resources Department, 725 Summer Street NE, Suite A, Salem, OR 97301 or by email to WRD_DL_rule-coordinator@water.oregon.gov.

Comments received after 5 P.M. on May 31, 2024, will not be reviewed or considered by the agency unless the agency decides to extend the public comment period for everyone.

REMOTE HEARING DETAILS

MEETING URL: [Click here to join the meeting](#)

PHONE NUMBER: 253-215-8782

CONFERENCE ID: 98204233951

SPECIAL INSTRUCTIONS:

To attend virtually, please click on the URL link provided above and complete the registration steps. Alternatively, you

may email WRD_DL_rule-coordinator@water.oregon.gov no later than noon (12:00 p.m.) on May 21, 2024, to receive the registration link.

To attend by phone, please email WRD_DL_rule-coordinator@water.oregon.gov no later than noon (12:00 p.m.) on May 21, 2024, to receive the conference ID and passcode for the phone number provided above.

Each person attending the hearing virtually or by phone who wishes to comment will be asked to identify themselves so their names may be added to the virtual sign-up sheet. During the hearing, the hearing officer will alternate between those commenting in person, virtually, and by phone, proceeding in the order in which attendees have registered to comment. The hearing will close no later than 9:00 p.m.

The hearing session will be recorded and available for viewing within 48 hours of the close of the hearing on the rulemaking website: <https://www.oregon.gov/owrd/programs/GWWL/GW/Pages/Groundwater-Rulemaking.aspx>.

Close captioning will be enabled for virtual participants.

In addition to presenting oral comments at the hearings, anyone may submit written comments until 5 P.M. on May 31, 2024, which is the close of the public comment period. Written comments should be sent to "Laura Hartt" at Oregon Water Resources Department, 725 Summer Street NE, Suite A, Salem, OR 97301 or by email to WRD_DL_rule-coordinator@water.oregon.gov.

Comments received after 5 P.M. on May 31, 2024, will not be reviewed or considered by the agency unless the agency decides to extend the public comment period for everyone.

NEED FOR THE RULE(S)

After decades of groundwater declines (Scandella and Iverson 2021), the Oregon Water Resources Department (OWRD) is responding to the modern water realities experienced by Oregonians. To limit the long-term impact of unsustainable groundwater depletion around the state, OWRD is working to modify rules governing new groundwater right applications. With a forward-looking approach that considers the needs of future generations, OWRD is working to safeguard existing surface water and groundwater users and the livelihoods they support, while managing groundwater resources more sustainably.

Water is a finite and critical resource. Current rules evaluating the relationship between surface and groundwater arbitrarily limit the evaluation of hydraulically connected groundwater withdrawals on surface water availability (690-009 et seq.). As a result, where groundwater and surface water are hydraulically connected there are senior surface water right holders who are routinely regulated off while junior groundwater right holders are allowed to continue using water. These proposed rules rely on best available science to establish criteria ensuring that new permits will not further deplete already over appropriated surface water bodies, both in principle (Alley et al. 2002; Barlow and Leake 2012; Bredehoeft et al. 1982; Theis 1940; Woessner 2020; Winter et al. 1998), and in Oregon specifically (Conlon et al. 2005; Gannett et al. 2007, 2012, 2017, and 2001; Gingerich et al. 2022; Graham et al. 2010; Herrera et al. 2014). Much of the water in streams during summer months comes from groundwater sources. As groundwater sources decline, less surface water becomes available in streams, rivers, and lakes to meet the needs of existing surface water users and to support healthy fish, aquatic habitat, and recreation. Additionally, the lack of a definition implementing the statutory policy directive to maintain reasonably stable water levels has led to excessive groundwater declines in some parts of the state (Scandella and Iverson 2021). Some parts of the state are experiencing dry wells and water scarcity that impact families, farmers, industry and recreation (Oregon Secretary of State 2023).

The Ground Water Act of 1955 outlines the state's policy goals for issuing new groundwater rights and prioritizes the preservation of the public welfare, safety and health (ORS 537.621 and 537.525). The Act presumes that a new groundwater allocation will preserve the public welfare, safety and health if four criteria are met: (1) the proposed use is allowed in the applicable basin program; (2) water is available; (3) other water rights will not be injured; and (4) the proposed use complies with the rules of the Oregon Water Resources Commission (ORS 537.621). This rulemaking focuses on number (2), water is available. These rules propose redefining the criteria for making a finding of groundwater availability based on (1) the presence of reasonably stable water levels (ORS 537.525(7)), (2) avoidance of substantial interference with existing rights to appropriate surface water (ORS 537.525(9)), and (3) a finding that the proposed groundwater pumping rate is likely to be obtainable given the expected yield of the proposed well(s) (ORS 537.525(10)). The rules establish a new definition of substantial interference for the allocation of new groundwater rights; the rules re-adopt the prior definition of substantial interference for purposes of regulating existing rights.

Implementation of the Ground Water Act of 1955 and the definition of "water is available" in Division 300 further relies on rules in Divisions 8 (Statutory Ground Water Terms, last updated 1990), 9 (Ground Water Interference with Surface Water, last updated 1988), and 410 (Statewide Water Resource Management, last updated 1992). These rules do not apply to exempt water uses.

DOCUMENTS RELIED UPON, AND WHERE THEY ARE AVAILABLE

This is an abbreviated list of the principal documents relied upon for the proposed rulemaking. Please contact the Oregon Water Resources Department for a complete list of documents relied upon and the location(s) of those documents.

Alley, W. M., et al., Flow and Storage in Groundwater Systems, 296 *Science* 5575, 1985–1990 (2002), available at <https://doi.org/10.1126/science.1067123>.

Anderson Perry & Associates, Inc., Greater Harney Valley Area Water Feasibility Study for Harney County, Oregon, Report prepared for Harney County (2020), available from OWRD upon request.

Barlow, P.M., and Leake, S.A., Streamflow depletion by wells—Understanding and managing the effects of groundwater pumping on streamflow, U.S. Geological Survey Circular 1376 (2012), available at https://pubs.usgs.gov/circ/1376/pdf/circ1376_barlow_report_508.pdf.

Bredehoeft, J. D., et al., Groundwater: The Water-Budget Myth, in *Scientific Basis of Water-Resource Management* 51-57 (1982), available at <https://nap.nationalacademies.org/read/19530/chapter/7>.

Conlon, T. D., et al., Ground-Water Hydrology of the Willamette Basin, Oregon, U.S. Geological Survey Scientific Investigations Report 2005–5168 (2005), available at <https://pubs.usgs.gov/sir/2005/5168/>.

Dalgaard, S., State of Water Justice in Oregon: A Primer on How Oregon Water Infrastructure Challenges Affect Frontline Communities Across the State, White Paper prepared for the Oregon Environmental Council and the Oregon Water Futures Project (2022), available at <https://www.oregonwaterfutures.org/water-justice-report>.

Dieter, M.A. et al., Estimated use of water in the United States in 2015, U.S. Geological Survey Circular 1441 (2018), available at <https://pubs.usgs.gov/publication/cir1441>.

ECONorthwest, Economic Contributions of Oregon's Commercial Marine Fisheries, Report prepared for Oregon Department of Fish and Wildlife (2019), available at <https://econw.com/project/economic-contributions-of-oregons-commercial-marine-fisheries/>.

Executive Order No. 23-4, Establishing Statewide Housing Production Goal and Housing Production Advisory Council (January 1 2023), available at <https://www.oregon.gov/gov/eo/eo-23-04.pdf>.

Gannett, M. W. et al., Ground-Water Hydrology of the Upper Klamath Basin, Oregon and California, U.S. Geological Survey Scientific Investigations Report 2007–5050 (2007), available at <https://doi.org/10.3133/sir20075050>.

Gannett, M. W. et al., Ground-Water Hydrology of the Upper Deschutes Basin, Oregon, U.S. Geological Survey Water-Resources Investigations Report 00–4162 (2001), available at <https://doi.org/10.3133/wri20004162>.

Gannett, M. W. et al., Simulation of groundwater and surface-water flow in the upper Deschutes Basin, Oregon, U.S. Geological Survey Scientific Investigations Report 2017–5097 (2017), available <http://pubs.er.usgs.gov/publication/sir20175097>.

Gannett, M. W. et al., Groundwater simulation and management models for the upper Klamath Basin, Oregon and California, U.S. Geological Survey Scientific Investigations Report 2012–5062 (2012), available at [://doi.org/10.3133/sir20125062](https://doi.org/10.3133/sir20125062).

Gingerich, S.B. et al., Groundwater resources of the Harney Basin, southeastern Oregon, U.S. Geological Survey Scientific Investigations Report 2021-5103 (2022), available at <https://doi.org/10.3133/sir20215103>.

Graham, C. et al., Estimating the deep seepage component of the hillslope and catchment water balance within a measurement uncertainty framework, 24(5) *Hydrological Processes* 3631–3647 (2010), available at <https://onlinelibrary.wiley.com/doi/epdf/10.1002/hyp.7788>.

Herrera, N. B. et al., Simulation of groundwater flow and the interaction of groundwater and surface water in the Willamette Basin Central Willamette subbasin, Oregon, U.S. Geological Survey Scientific Investigations Report 2014–5136 (2014), available at <https://doi.org/10.3133/sir20145136>.

OAR 690-310-0110, available at <https://secure.sos.state.or.us/oard/displayDivisionRules.action?selectedDivision=3195>.

OAR 690-310-0130, available at <https://secure.sos.state.or.us/oard/displayDivisionRules.action?selectedDivision=3195>.

OAR 690-315-0090, available at <https://secure.sos.state.or.us/oard/displayDivisionRules.action?selectedDivision=3196>.

Oregon Office of Rural Health, Spreadsheet of Oregon Zip Codes, Towns, Cities and Service Areas and their ORH Urban/Rural/Frontier Designation (2023), accessible at <https://www.ohsu.edu/oregon-office-of-rural-health/about-rural-and-frontier-data>.

ORS 183.310, available at https://www.oregonlegislature.gov/bills_laws/ors/ors183.html.

ORS 183.336, available at https://www.oregonlegislature.gov/bills_laws/ors/ors183.html.

ORS 536.310(12), available at https://www.oregonlegislature.gov/bills_laws/ors/ors536.html.

Oregon Employment Department (OED), Quarterly Census of Employment and Wages, available upon request from OED (2023), <https://www.qualityinfo.org/>.

Oregon Water Resources Department, Groundwater Information System (Database), available at https://apps.wrd.state.or.us/apps/gw/gw_info/gw_info_report/Default.aspx.

Oregon Water Resources Department, Oregon Statewide Long-Term Water Demand Forecast, White Paper prepared by MWH for OWRD (2015), available at https://www.oregon.gov/owrd/Documents/OWRD_2015_Statewide_LongTerm_Water_Demand_Forecast.pdf.

Oregon Secretary of State, Advisory Report: State Leadership Must Take Action to Protect Water Security for All Oregonians, Report 2023-04 (2023), available at <https://sos.oregon.gov/audits/Documents/2023-04.pdf>.

Perkowski, M., Oregon water protest backlog grows despite \$3 million reduction project, Capital Press (October 30, 2023), available at https://www.capitalpress.com/ag_sectors/water/oregon-water-protest-backlog-grows-despite-3-million-reduction-project/article_2a638d10-7768-11ee-b8d6-93ac22d44974.html.

Pilz, D. et al., The Business Case for Investing in Water in Oregon, White Paper prepared for OWRD (2023), available at https://www.oregon.gov/owrd/WRDPublications1/230721_FINAL_Business_Case_for_Water_in_OR.pdf.

Rosenberger, R.S., Total Net Economic Value from Residents' Outdoor Recreation Participation in Oregon, Final Report prepared for Oregon State University (2018), available at <https://www.oregon.gov/oprd/PRP/Documents/SCORP-2018-Total-Net-Economic-Value.pdf>.

Scandella, B.P., Analysis of Oregon wells correlated with precipitation. Memo 2/9/2024 to OWRD Groundwater Allocation Rulemaking Team (2024a). Available from OWRD upon request.

Scandella, B.P., Susceptibility of Oregon wells to being dried by water level declines. Memo 2/10/2024 to OWRD Groundwater Allocation Rulemaking Team (2024b). Available from OWRD upon request.

Scandella, B. and Iverson, J.T., Oregon Groundwater Resource Concerns Assessment, White Paper prepared for OWRD (2021), available at https://www.oregon.gov/owrd/WRDReports/2021_Groundwater_Resource_Concerns_Report.pdf.

Theis, C.V., The Source of Water Derived From Wells: Essential Factors Controlling the Response of an Aquifer to Development, U.S. Geological Survey Ground Water Branch Ground Water Notes 34: 277-280 (1940), available at <https://water.usgs.gov/ogw/pubs/Theis-1940.pdf>.

United States Department of Agriculture, Summary by Size of Farm: 2022, Table 71 in 2022 Census of Agriculture, Oregon State and County Data (2024), available at https://www.nass.usda.gov/Publications/AgCensus/2022/Full_Report/Volume_1,_Chapter_1_State_Level/Oregon/st41_1_071_County_Data.pdf.

United States Department of Agriculture, Draft Programmatic Environmental Assessment, Harney Valley Groundwater Conservation Reserve Enhancement Program (2023), available at https://www.fsa.usda.gov/Assets/USDA-FSA-Public/usdfiles/State-Offices/Oregon/pdfs/draft_pea_proposed_harney_valley_groundwater_crep_final5423.pdf.

Woessner, W.W., Groundwater-Surface Water Exchange (2020), available at <https://gw-project.org/books/groundwater-surface-water-exchange/>.

Winter, T. C. et al., Ground water and surface water; a single resource, U.S. Geological Survey Circular 1139 (1998), available at <http://pubs.er.usgs.gov/publication/cir1139>.

STATEMENT IDENTIFYING HOW ADOPTION OF RULE(S) WILL AFFECT RACIAL EQUITY IN THIS STATE

The Oregon Water Resources Department (OWRD) extended invitations to several Oregon non-profit organizations focused on racial justice and equity in the context of water, as well as broader environmental, economic, and social issues. OWRD asked these organizations for additional recommendations and extended more RAC invitations. OWRD also invited all nine federally recognized Tribes to serve on the RAC. The final RAC composition included members from Oregon's Tribal communities, environmental and social justice organizations, local governments, farmers, ranchers, domestic well owners, well drillers, economists, climatologists, consultants, and water rights experts.

The RAC discussed the issue of racial equity in the context of this rulemaking, noting that data were lacking to quantify impacts adequately, but agreed that a qualitative assessment was feasible.

RAC members also offered the following comments:

--Because everyone relies on food and clothing, to the extent the rulemaking impacts agriculture, everyone should be impacted equally.

--Some Tribes may benefit from the rulemaking due to the senior nature of their water rights."

--As new water rights become more difficult or expensive to acquire, local governments may face trade-offs between meeting the state's affordable housing goals (Executive Order 23-4 (2023)) and achieving more economic development, which may impact historically disadvantaged communities.

The proposed rule changes are intended to protect existing water rights holders; however, the rules update the criteria for issuing new groundwater rights which will impact future water rights applicants. Because the proposed rule changes are likely to result in the issuance of fewer new water rights, existing racial inequities would likely be exacerbated due to prior appropriation laws. Future water rights may be available through purchase; however, it is expected that as the cost of acquiring new rights rises, those costs will be passed on to water users, consumers and ratepayers, while economic benefits will continue to accrue for existing water rights holders. To the extent that economics and race are correlated, the rising costs associated with acquiring new water rights, either through purchase or with the assistance of paid consultants, are likely to be inequitable as well.

The proposed rules would not apply to existing or future water exempt uses outlined in statute (ORS 537.211), including domestic wells. However, domestic well owners would benefit from the proposed changes because the new rules could alleviate the impacts of declining groundwater levels that have led to the need for deepening wells and in some cases caused wells to run dry. Many rural households rely on private domestic wells for drinking water; many residents in these rural communities are of low-income and/or renters, often disproportionately represented by people of color (S. Dalgaard 2022). Examples of Oregon counties with both rural communities and sizeable non-white populations include Malheur (41%), Umatilla (36%), Polk (24%), and Multnomah (32%) (Oregon Office of Rural Health 2023; S. Dalgaard 2022). Again, to the extent that economics and race are correlated, costs associated with remediating dry wells are likely to be inequitable.

The proposed rule changes intend to provide greater protection of surface water from further over appropriation while alleviating groundwater level declines. The public's interest in instream water rights and equitable beneficial uses, including fishing, wildlife habitat, culture, recreation, and water quality, should benefit from the rulemaking.

Further public comments on this rulemaking and its impact on racial equity in the state is encouraged throughout the posted public comment period.

FISCAL AND ECONOMIC IMPACT:

The Oregon Water Resources Department (OWRD) is updating the review process for new groundwater applications, to ensure sustainable use of groundwater resources while protecting existing surface and groundwater rights holders. If adopted, the proposed rule changes are likely to have both positive and negative economic impacts; however, failure to enact new rules also is likely to lead to both positive and negative economic consequences.

According to Pilz et al. (2023), approximately 48% of Oregon's total economic output and 44% of the state's employment rely on water-dependent businesses. Notably, these estimates are conservative, because they do not include the economic contributions from recreation, commercial fishing, or power generation (Pilz et al. 2023). Approximately 22% of all of Oregon's water withdrawals come from groundwater; just over 80% of those groundwater withdrawals are for irrigation purposes (Dieter et al. 2018).

Pilz et al. (2023) examined the state's water-dependent businesses, revealing the following regarding overall contributions to the state's economy:

--Economic modeling suggests industry (includes manufacturing, health care/hospitals, colleges/universities, hotels/motels, restaurants/food service, car washes, dry-cleaning/laundry, landscaping/horticulture, breweries/wineries, waste remediation) contributes \$88.8 billion annually.

--In 2017, freshwater-related outdoor recreation contributed \$63.2 billion (citing Rosenberger 2018).

--Economic modeling suggests irrigated agriculture contributes \$7.3 billion annually.

--In 2017, coastal commercial salmon fishing contributed \$28.4 million (citing ECONorthwest 2019).

The proposed rule changes will protect the substantial investment Oregon has made in these and other water-dependent businesses because the revised process will protect existing uses by limiting issuance of new groundwater rights to when water is available for appropriation. However, because OWRD anticipates issuing fewer new groundwater rights through the updated process, some new or expanding water-dependent businesses may face challenges securing new water rights while other new businesses that rely on adequate river flows and lake levels may benefit from adoption of the proposed rules. For example, growth of irrigated agriculture may need to be supported by water conservation actions that result in conserved water or, through transfers of existing water rights where new water rights are not available. On the other hand, water-dependent recreation and tourism as well as commercial fishing may experience growth due to healthier aquatic ecosystems.

Failure to act through rule changes also may result in adverse economic impacts, including those stemming from the cost of remedial action needed to address groundwater level declines and reduced streamflow. The cost of measures needed to remediate the impacts of groundwater overallocation on domestic and irrigation well users in the Harney Basin are a good example. According to Pilz et al. (2023), private wells in Harney County have experienced dramatic declines in static groundwater levels by as much as 140 feet and in some cases wells have gone dry. Anderson Perry & Associates (2020) estimate as many as 1,086 households in unincorporated parts of the County rely on exempt wells for their domestic water. Pilz et al. (2023) estimated the full economic impact of providing an alternative water supply source to these 1,086 households in the event of well failure to range between \$7.5 million and \$10.5 million. With respect to irrigation use, the United States Department of Agriculture estimates a cost of more than \$58 million to retire 20,000 acres of groundwater irrigated cropland in the Harney Basin Conservation Reserve Enhancement Program (CREP).

The average cost to assist homeowners with dry domestic wells under the Department's Well Abandonment Repair and Replacement Fund is \$26,500 per well. The Department estimates that approximately 40,000 more domestic wells are at risk of going dry in the absence of this rulemaking (Scandella 2024b), translating to hundreds of millions of dollars in total costs. Moreover, in the absence of the rulemaking, other domestic wells may go dry seasonally, requiring domestic owners to rely on alternatives, again translating to additional costs.

Consequently, the costs associated with failure to act through this rulemaking will be borne by state and federal agencies that seek to address the impacts of overallocation, as well as the costs to existing water users and domestic well owners that must make changes because of their supplies not being sustainable.

COST OF COMPLIANCE:

(1) Identify any state agencies, units of local government, and members of the public likely to be economically affected by the rule(s). (2) Effect on Small Businesses: (a) Estimate the number and type of small businesses subject to the rule(s); (b) Describe the expected reporting, recordkeeping and administrative activities and cost required to comply with the rule(s); (c) Estimate the cost of professional services, equipment supplies, labor and increased administration required to comply with the rule(s).

(1) Identify any state agencies, units of local government, and members of the public likely to be economically affected by the rule(s).

Additional costs to OWRD stemming from the rulemaking are difficult to quantify. Because OWRD most likely will issue fewer groundwater rights due to the rule changes, OWRD may see an early uptick followed by a decline in applications for new ground water rights and start cards for new well construction where water remains available for allocation. OWRD cannot estimate the associated revenue impacts as it is not possible to determine how many applications will be received after the rules are adopted. OWRD estimates that each new groundwater right application fee may range between \$2,000 and \$7,500 depending on the amount of volume requested. However, these fees only cover roughly half the cost of administering the review process.

OWRD may experience an increase in the number of transfer applications in areas where groundwater is not available for allocation to new water rights; however, OWRD cannot forecast how many transfers may be requested. OWRD estimates that each new transfer application fee ranges between \$1,840 (to change the location of a single well involving a small water volume) to \$5,860 or more (for changes involving multiple well locations, multiple water rights, and/or large volumes of water). Notably, these application fees only cover slightly more than half the cost of administering the water rights transfer review process.

OWRD also anticipates increased legal costs associated with challenges to the new rules as well as disputes over denial of new water rights applications; however, the Department cannot predict how many of those may occur. OWRD estimates that each contested case hearing costs the Department between \$50,000 and \$100,000 (Perkowski 2023).

Oregon Department of Fish and Wildlife, Oregon Department of Environmental Quality, and other state agencies may experience additional costs in terms of time and effort to interpret and apply the new rules (e.g., Division 33 reviews). These agencies also may experience increased legal costs associated with disputes over denial of new water rights applications; some but not all these legal costs are passed on to OWRD.

Local governments also may experience additional costs associated with the implementation of the new rules, including the need to explore additional water conservation and efficiency measures and/or acquire existing water rights through the transfer process rather than develop new rights to meet future demands. Ratepayers may experience higher water bills because of rising costs associated with local government providing water for residential and commercial use. Rising costs also may require local governments to revise their comprehensive plans by rebalancing projected water supply

needs to ensure they are able to meet conflicting demands, including provision of affordable housing. OWRD notes that even in the absence of the new rules, acquisition of new groundwater through either application or purchase and investing in new infrastructure to access those new rights may not be as cost-effective as either enhancing conservation and efficiency measures or transferring the type of use, place of use, and/or point(s) of diversion/appropriation authorized under existing water rights.

OWRD cannot estimate how many cities may be affected, because the Department cannot predict how many cities would seek to apply for a new water right and would be successful under the current as compared with the proposed rules. A preliminary review of approved Water Management and Conservation Plans (WMCPs) submitted by municipalities suggests that few of those relying on groundwater to meet at least half of their water supply needs will need to acquire new groundwater rights within the next 20 years, as outlined by OAR690-086-0180(8). Notably, several WMCPs predate the most recent 2020 U.S. Census data as well as the Covid-19 pandemic and may not reflect the most current population and employment trends (either positive or negative). With few exceptions, these WMCPs also predate the Oregon Governor's recent affordable housing goals (see Executive Order No. 23-04 and House Bill 2001(2023)), which may necessitate municipalities updating comprehensive plans and WMCPs to rebalance economic priorities to achieve these goals.

With respect to municipalities, the likelihood of approval under the current as compared with the proposed rules will vary depending on many factors, including the requested aquifer location and the quantity of the requested use. Also noteworthy, municipal water rights applicants are somewhat unique because unlike most new water rights applicants, municipalities may reserve unappropriated water for future economic development (ORS 537.140, 537.356, 537.358), may reserve for needs 20 years into the future with the possibility of extensions to further develop a water right permit in response to changing economic circumstances (ORS 537.230, OAR 690-315-0090), are exempt from forfeiture (ORS 540.610), and receives preference under the public interest presumption that prioritizes water for human consumption over other purposes when other proposed uses of water mutually conflict or when available water supplies are insufficient to meet human consumption needs (ORS 536.310(12), OAR 690-310-0110, OAR 690-310-0130). Because the new rules protect existing water rights holders, municipalities with existing water rights will benefit from the rulemaking. Also, because the new rules will result in the issuance of fewer new groundwater rights based on groundwater availability for allocation, the unique treatment municipalities receive during water rights application reviews suggests that municipalities may not be impacted as much as other water use sectors seeking new groundwater rights.

The Oregon Ground Water Association (OGWA) has suggested that the well construction industry may experience adverse economic impacts due to the rulemaking because fewer groundwater rights issued in the future may mean fewer new wells constructed, particularly for irrigation purposes. Oregon has approximately 90 well construction companies employing just over 100 licensed water well drillers. OWRD notes that these rules do not impact the construction of exempt use wells, nor do they impact well reconstruction, deepening, or abandonment. Moreover, there is a significant backlog of customers waiting for construction of authorized wells such that these rules are not expected to impact the well construction industry in the near-term.

In response to OGWA input, OWRD has compiled the following information pertaining to the construction of new irrigation wells to access new groundwater rights issued for the purpose of irrigation:

Year, Number of New Wells Constructed to Access New Groundwater Rights

2014, 154
2015, 170

2016, 121
2017, 101
2018, 100
2019, 93
2020, 91
2021, 55
2022, 50

Since 2014, the number of new wells constructed to access new groundwater rights for the purpose of irrigation has declined by approximately 68%. The reasons for the decline are complex. For purposes of providing a range of potential economic impacts, OWRD has chosen a high value of 100 new irrigation wells constructed to support new groundwater rights (the number predating the Covid-19 pandemic) and a low value of 50 new wells constructed (the most recent number).

For any new well construction, costs are highly variable, depending on the location, depth, diameter, materials, and nature of the proposed groundwater well itself, as well as a drilling contractor's operating expenses including wages, benefits, and overhead. During the RAC process, OGWA suggested that new well construction may range between \$50,000 and \$1 Million, averaging about \$140,000 per new irrigation well, which translates to \$7 Million (for 50 new wells) to \$14 Million (for 100 new wells) in direct statewide well construction revenue.

OWRD anticipates many new groundwater rights under the proposed rules will be denied. OWRD has compiled the following information examining the range of potential economic impacts on well construction arising from issuance of fewer new groundwater rights supporting irrigation use:

Scenario 1:

Hypothetical Reduction in New Wells Constructed to Access New Groundwater Rights Issued for the Purpose of Irrigation: 25%

Hypothetical Reduction in Revenue Generated Statewide (assuming \$140,000/well and 50 wells): \$1.75 Million

Hypothetical Reduction in Revenue Generated Statewide (assuming \$140,000/well and 100 wells): \$3.5 Million

Scenario 2:

Hypothetical Reduction in New Wells Constructed to Access New Groundwater Rights Issued for the Purpose of Irrigation: 50%

Hypothetical Reduction in Revenue Generated Statewide (assuming \$140,000/well and 50 wells): \$3.5 Million

Hypothetical Reduction in Revenue Generated Statewide (assuming \$140,000/well and 100 wells): \$7.0 Million

Scenario 3:

Hypothetical Reduction in New Wells Constructed to Access New Groundwater Rights Issued for the Purpose of Irrigation: 75%

Hypothetical Reduction in Revenue Generated Statewide (assuming \$140,000/well and 50 wells): \$5.25 Million

Hypothetical Reduction in Revenue Generated Statewide (assuming \$140,000/well and 100 wells): \$10.5 Million

Scenario 4:

Hypothetical Reduction in New Wells Constructed to Access New Groundwater Rights Issued for the Purpose of Irrigation: 90%

Hypothetical Reduction in Revenue Generated Statewide (assuming \$140,000/well and 50 wells): \$6.3 Million

Hypothetical Reduction in Revenue Generated Statewide (assuming \$140,000/well and 100 wells): \$12.6 Million

In other words, the hypothetical economic impact on well construction associated with the issuance of fewer groundwater rights for the purposes of irrigation may range from approximately \$1.75 Million in reduced revenue statewide to \$12.6 Million in reduced revenue statewide.

However, the continued over-allocation of Oregon's groundwater resources has led to more existing domestic wells going dry, which has increased business for Oregon's well drillers. The rules are likely to also reduce the number of domestic wells that go dry. As a result, there may be additional revenue reductions; however, given that well drillers have been unable to keep up with demand; it may not actually affect revenues.

(2)(a) Estimate the number and type of small businesses subject to the rule(s);

ORS 183.336 requires agencies to use available information to estimate the number and type of small businesses likely to be subject to the proposed rules. A small business is defined as "a corporation, partnership, sole proprietorship or other legal entity formed for the purpose of making a profit, which is independently owned and operated from all other businesses, and which has 50 or fewer employees" (ORS 183.310). Example of types of small businesses that may be impacted either positively or negatively by the proposed rules include well drillers, private water systems, small farms, ranches, nurseries, vineyards, recreational outfitters, recreational guides, commercial fishing, mining, consultants, and law firms.

According to the State of Oregon Employment Department (2023), there are just over 170,000 small businesses in the state (as defined by ORS 183.310) that pay unemployment insurance (UI) taxes. The sector breakdown is as follows:

Sector, Number of Small Businesses
Natural Resources and Mining, 4,940
Construction, 18,184
Manufacturing, 6,088
Trade, Transportation, and Utilities, 21,683
Information, 6,077
Financial Activities, 11,304
Professional and Business Services, 33,601
Education and Health Services, 25,830
Leisure and Hospitality, 12,673
Other Services, 16,723
Government, 506
Unclassified, 12,757
All Sectors, 170,366

Notably, this accounting does not include many businesses within the agricultural sector that are not required to pay UI taxes. OWRD does not have information on the number of small agricultural businesses as defined by ORS 183.310. According to the 2022 Census of Agriculture (USDA 2024), there are just over 35,500 farms in Oregon, two-thirds of which are under 50 acres in size.

OWRD cannot estimate how many of small businesses reporting UI taxes are water dependent. Similarly, the Department cannot estimate how water-dependent small businesses or small farms may be affected, because the

Department does not have information available to predict how many persons or entities would seek to apply for a new water right through purchase or transfer and would be successful under the current as compared with the proposed rules. The Department also does not have information concerning how future water markets may evolve in response to limited availability of future water rights. The likelihood of approval under the current as compared with the proposed rules also will vary depending on the requested aquifer location. Furthermore, OWRD cannot predict the desired expansion of irrigated agriculture, manufacturing, commercial fishing, outdoor recreation, and other water-dependent businesses.

(2)(b) Describe the expected reporting, recordkeeping and administrative activities and cost required to comply with the rule(s);

In response to the new rules, OWRD will update the water rights application to reflect that no new water rights will be issued if an affirmative finding of groundwater availability cannot be made. In some cases, applicants may be permitted to collect additional data and other information to support their applications, which may contribute to the overall cost of obtaining a new water right under the new rules. However, OWRD does not anticipate that the cost of ongoing reporting, recordkeeping, or administrative activities will increase because of the rulemaking.

(2)(c) Estimate the cost of professional services, equipment supplies, labor and increased administration required to comply with the rule(s).

Currently, water rights applicants rely on consulting services. Under the new rules, applicants may increase their reliance on these services. However, OWRD does not anticipate that the cost of equipment supplies, labor or administration will increase because of the rulemaking.

DESCRIBE HOW SMALL BUSINESSES WERE INVOLVED IN THE DEVELOPMENT OF THESE RULE(S):

The Rules Advisory Committee included members representing small businesses most likely to be affected by this rulemaking, including farmers, ranchers, wineries, nurseries, irrigators, well drillers, and consultants.

WAS AN ADMINISTRATIVE RULE ADVISORY COMMITTEE CONSULTED? YES

RULES PROPOSED:

690-008-0001, 690-009-0010, 690-009-0020, 690-009-0030, 690-009-0040, 690-009-0050, 690-009-0060, 690-300-0010, 690-410-0070

AMEND: 690-008-0001

RULE SUMMARY: Replaces "ground water" with "groundwater" throughout, consistent with hydrogeologic principles and convention; adds definition for "Annual High Water Level" as the reference point for calculations of the rate and magnitude of groundwater level changes; updates definition of "Aquifer" for consistency with hydrogeologic principles and other rule definitions; updates definitions for "Declined Excessively" and "Excessively Declining Water Levels" for consistency with hydrogeologic principles by incorporating added definition of "Annual High Water Level"; modifies definition of "Overdraw" to include "Overdrawing" and updates definition for consistency with other defined terms; modifies definition of "Substantial Interference" to include "substantial interference," "substantially interfere," "undue interference," or "unduly interfere," including updates to align with Division 9 definitions pertaining to new groundwater allocations (OAR 690-009-0010, 690-009-0020, 690-009-0040, 690-009-0050); adds definition for "Reasonably Stable Groundwater Levels" to support groundwater allocation determinations based on an assessment of the rate of groundwater level decline and total decline (see Scandella 2024a), including exemptions for Critical Groundwater Areas and allowing supersedence by basin program rules; updates definition of "Substantial Thermal

Interference" for consistency with hydrogeologic principles; includes minor grammar correction in definition of "Wasteful Use"; rennumbers rule definitions to adjust added and deleted rules.

CHANGES TO RULE:

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 water-bearing body of naturally occurring earth materials that is sufficiently permeable to yield useable quantities of water to wells and/or springs.~~ Annual High Water Level" means the highest elevation (shallowest depth) static groundwater level that exists in a groundwater reservoir or part thereof in a year. ¶

~~(2) "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 or varies gradually with location with respect to characteristics such as potentiometric head, chemistry, and temperature. ¶~~

~~(3) "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.¶~~

~~(34) "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.¶~~

~~(45) "Declined Excessively" means any cumulative lowering of the wAnnual High 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 eEconomic pPumping ¶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.~~ substantially interfere with a surface water source as defined in OAR 690-008-0001(10); or ¶

~~(d) Constitutes a lowering of the aAnnual hHigh wWater ¶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 aAnnual hHigh wWater ¶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 eEconomic pPumping ¶Level, whichever is shallower.¶~~

~~(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 wAnnual High 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. ¶

(78) "Overdraw" means to artificially produce water, in any one-year period, or "Overdrawing" means the total authorized groundwater use from a ground-water reservoir, or part thereof, at a rate that has a combined annual volume that: ¶

(a) Exceeds the average annual recharge to that ground-water supply over the period of record; or, reservoir. ¶

(9) "Reasonably Stable Groundwater Levels" means: ¶

(a) 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 effect; The Annual High Water Levels as measured at one or more representative wells in a groundwater reservoir or part thereof: ¶

(A) indicate no decline or an average rate of decline of less than 0.6 feet per year over any immediately preceding averaging period with duration between 5 and 20 years. Four Annual High Water Levels are required to calculate the rate of change; one must have been measured in the year to which the evaluation of reasonably stable applies, and at least one must have been measured between 5 and 20 years prior; and ¶

(B) have not declined by more than 25 feet from a reference level to the level in the year to which the evaluation of reasonably stable applies. The reference level shall be the highest known water level unless Annual High Water Levels have been increased measurably by human activity, in which case the Department may set a different reference level using best available information. ¶

(b) If water level data senior to the causative are insufficient to perform either test in (a) for a given year, then the Department will presume that ground-water appropriation(s). ¶

(c) Reduces the availability of surface waters levels are not reasonably stable unless: ¶

(A) the most recent evaluation of reasonably stable applies to a year within 5 years of the given year, in which case the Department may presume that have been: the recent evaluation still applies; or ¶

(B) Withdrawn with an effective date senior to groundwater has not yet been extracted or authorized for extraction from the groundwater reservoir, in which case the Department may presume that groundwater levels are reasonably stable. ¶

(c) The Department may evaluate Reasonably Stable Groundwater Levels for the year of the priority dates of the causative a ground-water appropriations; or right application or for a later year if more recent data are available. ¶

(Bd) Restrictively classified with an effective date senior to the priority date(s) of the causative The limits in part (a) of this definition may be superseded by limits defined in a basin program rule adopted pursuant to the Commission's authority in ORS 536.300 and 536.310. Any proposed superseding basin program definition must consider, at a minimum, the anticipated impacts of the new definition on: ¶

(A) the number of wells that may go dry; and ¶

(B) the character and function of springs and groundwater dependent ecosystems; and ¶

(C) the long term, efficient, and sustainable use of ground-water approp for multiple beneficial purposes. ¶

(e) This definition does not apply to C riations. ¶

(8) "Substantial or Ucal Groundwater Areas designated under OAR 690-010. ¶

(10) "Substantial interference", "substantially interfere", "undue linterference", or "unduly interfere" 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) A reduction in Depletion of a surface water source with which the groundwater use has the Potential for Substantial Interference (OAR 690-009-0020(6)) and that: ¶

(A) is already over-appropriated during any period of the year and is the source for a surface water availability to an extent that: right having a priority date senior to the priority date(s) of the groundwater appropriation(s); or ¶

(AB) 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 is administratively or statutorily withdrawn with an effective date senior to the priority date(s) of the groundwater appropriation(s); or ¶

(C) is restrictively classified with an effective date senior to the priority date(s) of the groundwater appropriation(s); or ¶

(D) 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 and that have priority dates senior to the priority date(s) of the contributive groundwater appropriation(s) or is subject to a rotation agreement to address limited surface water

supplies among surface water rights that have priority dates senior to the priority date(s) of the groundwater appropriation(s); or ¶

(E) has a minimum perennial streamflow or instream water right that is unmet during any period of the year and has an effective date or priority date that is senior to the priority date(s) of the ground-water appropriation(s) cannot be satisfied. ¶

(b) The ground-water level being drawn down to the eEco`-nomic }Pumping 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. ¶

(102) "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~~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. ¶

(113) "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, ORS 536.027, ORS 536.300, ORS 536.310

Statutes/Other Implemented: ORS 537

AMEND: 690-009-0010

RULE SUMMARY: Adds "Applicability" to rule name; updates regulatory authority by removing redundant reference to ORS 537.730 and 537.775; incorporates current rule OAR 690-009-0030 and updates language by referring to the definition in Division 8 for "Substantial Interference."

CHANGES TO RULE:

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. ¶

(2) These rules ~~govern the use~~ establish criteria to guide the Department in determining whether a proposed of ground waters, pursuant to 537.730 and 537.775, where the existing groundwater use will substantially interfere (as defined in OAR 690-008-0001(10)) 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 ground-water is hydraulically connected to, and the use interferes with, surface water 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.

Statutory/Other Authority: ORS 537, ORS 536.027

Statutes/Other Implemented: ORS 537

AMEND: 690-009-0020

RULE SUMMARY: Removes definitions for "Commission," and "Director," because they are no longer referenced in Division 9; updates definition of "Department" for clarity; adds definition of "Effective and timely manner" to support rule OAR 690-009-0050 ("Ground Water Controls"); expands definition of "Hydraulic Connection" by adding "Hydraulic Interconnection" and updates definition for consistency with hydrogeologic principles; adds definition for "Potential for Substantial Interference" to support proposed rule changes in Divisions 8, 9 and 300; adds definition for "Proposed groundwater use" to support rule OAR 690-009-0040 ("Determination of Hydraulic Connection and Potential for Substantial Interference"); adds definition for "Streamflow depletion" to support proposed new definition for "Potential for Substantial Interference."

CHANGES TO RULE:

690-009-0020

Definitions ¶¶

Unless stated otherwise, as used in these rules:¶¶

(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.¶¶

(43) "Department" means the Water Resources 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).~~its Director, and all personnel employed by the Department. ¶¶

(4) "Effective and timely manner" means that regulation will result in the addition of any water to the surface water source during the relevant time period. ¶¶

(5) "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. ¶¶

(6) "Potential for Substantial Interference", or "PSI", means that a groundwater use will cause streamflow depletion based on the assessments described in OAR 690-009-0040 or OAR 690-009-0060, and therefore may cause or may have caused substantial interference with a surface water source. ¶¶

(7) "Proposed groundwater use" means an application to appropriate groundwater pursuant to ORS 536.750, ORS 537.143, or ORS 537.615 that is under consideration with the Department. ¶¶

(58) ~~"Director" means the W~~Streamflow depletion" means a reduction in the flow of a surface water Resources Director.¶¶

(6) ~~"H due to pumping a hydraulic Connection" means that water can move between a surface water source and an adjacent aquifer.~~ally connected groundwater source. Streamflow depletion encompasses: ¶¶

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

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

(79) "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, ORS 536.027

Statutes/Other Implemented: ORS 537

REPEAL: 690-009-0030

RULE SUMMARY: Repeals rule incorporated into rule 690-009-0010.

CHANGES TO RULE:

~~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~~

~~Statutes/Other Implemented:~~

AMEND: 690-009-0040

RULE SUMMARY: Updates rule to align proposed criteria for determination of "Hydraulic Connection and Potential for Substantial Interference" pertaining to new wells and groundwater rights with proposed definitions in Divisions 8 and 300 and with generally accepted hydrogeological principles.

CHANGES TO RULE:

690-009-0040

Determination of Hydraulic Connection and Potential for Substantial Interference ¶

~~For the purposes of permitting and distributing ground water,~~ (1) Hydraulic connection and the potential for substantial interference with a surface water suppliesource 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 th~~ according to these rules. These determinations shall be information provided based upon 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, application of generally accepted hydrogeologic principles using best available information concerning the hydrogeologic maps or reports, water level system of interest and other pertinent data collected during a field inspection, or any other available data or information that is a well(s) under consideration.¶

~~¶~~ (a) Appropriate, including any formation that is provided by potentially affected parties.¶

~~(2) All wells located a horizontal distance less than one-fourth mile from a surface water source 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 provin~~ the application or in the public comment period for the application shall be consider reasonable assistance to the applicant or appropriator in acquiring the satisfactory informd in the process of making these determination.s.¶

~~(3b) 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~~ Best available information may include, 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 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~~ flow models, and any other information that is used in applying generally accepted hydrogeologic principals and methodologies.¶

~~(c) The rate of appropriation is greater than one percent of the pertinent adopted minimum~~ A determination of hydraulic connection is a p ~~erennial 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 horizo~~ quisite for a determination of the potential for substantial interference.¶

~~(3) A determination of the potential for substantial 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 appropri~~ interference with a surface water source shall at a minimum include application, i ~~of 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 Investigat~~ 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 the United States Geological Survey: Book 4, Chapter D1);~~ an Aquifer to Development" by C. V. Theis, 1940; and, ¶

~~(Bb) A computer program or ground water model that is based on such or similar equations or techniques.¶¶~~
~~(5) An "Streamflow Depletion by 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 t - Understanding and Managing the Effects of Groundwater Pumping on Streamflow" by P. M. Barlow and S. A. Leake, 2012. ¶¶~~

~~(4) The potential to cause for substantial interference with the a surface water source. In making this determination, the Department shall exists if the well(s) under consider-at-leastion will, over the feullowing 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 term of the proposed or authorized groundwater use, obtain water from streamflow depletion. ¶¶~~

~~(5) For the purposes of issuing a permit or limited license for a proposed ground-water appropriation that was, or would have become, surface water; or¶¶~~

~~(d) Whether the poteuse, a finding of potential for substantial 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.¶¶~~

~~¶Publicationsith a surface water source may mean that water is not available for the proposed groundwater use if the use will substantially interfere with a surface water source as per the definitions in OAR 690-008-0001 and OAR 690-300-0010. ¶¶~~

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

~~Statutory/Other Authority: ORS 537~~

~~Statutes/Other Implemented: ORS 537, ORS 536.027~~

AMEND: 690-009-0050

RULE SUMMARY: Updates rule by adding preamble to reinforce that criteria pertaining to the control or regulation of existing wells and groundwater rights will not change under this rulemaking; specifies that current rule (OAR 690-009-0040) regarding hydraulic connection with surface water and determination of potential for substantial interference for control or regulation of existing wells and groundwater rights are re-adopted as 690-009-0060; replaces "ground water" with "groundwater."

CHANGES TO RULE:

690-009-0050

Ground~~W~~ater Controls ¶

Solely for the purpose of applying OAR 690-009-0050 to control or regulate groundwater rights in hydraulic connection with surface water, determination of the potential for substantial interference with a surface water source shall apply the version of OAR 690-009-0040 that became effective on November 4, 1988. The November 4, 1988 version of OAR 690-009-0040 is readopted as OAR 690-009-0060. Neither this section nor OAR 690-009-0060 applies to the establishment or order control of groundwater in a critical groundwater area. ¶

(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 690-009-00460, whenever substantial interference with a surface water source is suspected to exist by the Department. ¶

(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 methods set forth in OAR 690-009-00460(4)(d). ¶

(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.

Statutory/Other Authority: ORS 537, ORS 536.027

Statutes/Other Implemented: ORS 537

ADOPT: 690-009-0060

RULE SUMMARY: Re-adopts current rule OAR 690-009-0040 regarding hydraulic connection with surface water and determination of potential for substantial interference for control or regulation of existing wells and groundwater rights.

CHANGES TO RULE:

690-009-0060

Groundwater Controls: Determination of Potential for Substantial Interference

Solely for the purpose of applying OAR 690-009-0050 to control or regulate groundwater rights in hydraulic connection with surface water, determination of the potential for substantial interference with a surface water source shall be according to these OAR 690-009-0060 rules. ¶

(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 a surface water source 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 groundwater 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 groundwater 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, Book 4, Chapter D1 in Techniques of Water-Resources Investigations of the United States Geological Survey); ¶

(B) A computer program or groundwater 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 groundwater 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. ¶
[Note: Publications referenced are available from the agency.]
Statutory/Other Authority: ORS 536.027, ORS 537
Statutes/Other Implemented: ORS 537

AMEND: 690-300-0010

RULE SUMMARY: Removes reference to Division 15, which is renumbered as Division 380; adds reference to Division 380, which is renumbered from Division 15; adds "limited licenses" to correspond with current reference to Division 340; updates and expands definition of "Water is Available" by clarifying when determinations are made with respect to surface water versus groundwater sources and by aligning with proposed rules for Division 8 definitions ("reasonably stable water levels" and "substantial interference") and proposed rules for Division 9 governing groundwater interference with surface water (690-009-0010 through 0040); expands definition of "Water is Available" by adding requirement that requested rate of groundwater allocation be obtainable by the expected yield of wells proposed.

CHANGES TO RULE:

690-300-0010

Definitions ¶¶

The following definitions apply in OAR chapter 690, divisions ~~15~~, 310, 320, 330, 340, 350, and ~~358~~80 and to any permits, certificates, limited licenses, or transfers issued under these rules:¶¶

(1) "Affected Local Government" means any local government as defined in OAR 690-005-0015 within whose jurisdiction water is or would be diverted, conveyed, or used under a proposed or approved permit, water right transfer, or certificate.¶¶

(2) "Agricultural Water Use" means the use of water related to the production of agricultural products. These uses include, but are not limited to, construction, operation and maintenance of agricultural facilities and livestock sanitation at farms, ranches, dairies and nurseries. Examples of these uses include, but are not limited to, dust control, temperature control, animal waste management, barn or farm sanitation, dairy operation, and fire control. Such use shall not include irrigation.¶¶

(3) "Aquatic Life Water Use" means the use of water to support natural or artificial propagation and sustenance of fish and other aquatic life.¶¶

(4) "Artificial Groundwater Recharge" means the intentional addition of water to a groundwater reservoir by diversion from another source.¶¶

(5) "Beneficial Use" means the reasonably efficient use of water without waste for a purpose consistent with the laws, rules and the best interests of the people of the state.¶¶

(6) "Commercial Water Use" means use of water related to the production, sale or delivery of goods, services or commodities by a public or private entity. These uses include, but are not limited to, construction, operation and maintenance of commercial facilities. Examples of commercial facilities include, but are not limited to, an office, resort, recreational facility, motel, hotel, gas station, kennel, store, medical facility, and veterinary hospital. Examples of water uses in such facilities include, but are not limited to, human consumption, sanitation, food processing, and fire protection. Such uses shall not include irrigation or landscape maintenance of more than 1/2 acre. Notwithstanding this definition, exempt commercial water use under Division 340 does not include irrigation or landscape maintenance.¶¶

(7) "Comment" means a written statement concerning a particular proposed water use. The comment may identify elements of the application which, in the opinion of the commenter, would conflict with an existing water right or would impair or be detrimental to the public interest.¶¶

(8) "Commission" means the Water Resources Commission.¶¶

(9) "Contested Case" means a hearing before the Department or Commission as defined in ORS 183.310(2) and conducted according to the procedures described in ORS Chapter 53, ORS 183.413 - 183.497 and OAR chapter 690, division 2.¶¶

(10) "Cranberry Use" means all necessary beneficial uses of water for growing, protecting and harvesting cranberries. Examples of these uses include, but are not limited to, irrigation of cranberries or other crops in rotation, chemical application, flooding for harvesting or pest control, and temperature control.¶¶

(11) "Deficiency of Rate Right" means an additional right allowed from the same source for the same use at the same place of use when an earlier right does not allow a full duty or rate of flow of water.¶¶

(12) "Department" means the Water Resources Department.¶¶

(13) "Director" means the Director of the Department.¶¶

(14) "Domestic Water Use" means the use of water for human consumption, household purposes, domestic animal consumption that is ancillary to residential use of the property or related accessory uses.¶¶

(15) "Domestic Use Expanded" means the use of water, in addition to that allowed for domestic use, for watering up to 1/2-acre of lawn or noncommercial garden.¶¶

(16) "Drainage Basin", as used in OAR 690-340-0020, 690-340-0030 and 690-340-0050, means hydrologic unit

delineated as a cataloging unit by the US geological Survey Office of Water Data Coordination on the State Hydrologic Unit map.¶

(17) "Fire Protection Water Use" means the use and storage of water for the purpose of extinguishing fires or reducing the potential outbreak of fires.¶

(18) "Fish Bypass Structure", as used in OAR 690-340-0010, means any pipe, flume, open channel or other means of conveyance that transports fish that have entered a water diversion structure back to the body of water from which the fish were diverted.¶

(19) "Fish Screen", as used in OAR 690-340-0010, means a screen, bar, rack trap or other barrier at a water diversion to entrap or provide adequate protection for fish populations, including related improvements necessary to insure its effective operation.¶

(20) "Fishway," as used in OAR 690-340-0010, means any structure, facility or device used to facilitate upstream or downstream passage of fish through, over or around any man-made or natural barrier to free movement.¶

(21) "Forestland and Rangeland Management," as used in Chapter 595, Oregon Laws 1993, means water used for operations conducted on or pertaining to forestlands and rangelands. Such uses may include, but are not limited to, reforestation, road construction and maintenance, harvesting, vegetation management, and disposal of slash. Such use shall not include irrigation.¶

(22) "Groundwater Reservoir" means a designated body of standing or moving groundwater as defined in ORS 537.515(5).¶

(23) "Group Domestic Water Use" means the use of water for domestic water use by more than one residence or dwelling unit.¶

(24) "Human Consumption" means the use of water for the purposes of drinking, cooking, and sanitation.¶

(25) "Industrial Water Use" means the use of water associated with the processing or manufacture of a product. These uses include, but are not limited to, construction, operation and maintenance of an industrial site, facilities and buildings and related uses. Examples of these uses include, but are not limited to, general construction; road construction; non-hydroelectric power production, including down-hole heat exchange and geothermal; agricultural or forest product processing; and fire protection. Such use shall not include irrigation or landscape maintenance of more than 1/2 acre. Notwithstanding this definition, exempt industrial water use under Division 340 does not include irrigation or landscape maintenance.¶

(26) "Irrigation" means the artificial application of water to crops or plants by controlled means to promote growth or nourish crops or plants. Examples of these uses include, but are not limited to, watering of an agricultural crop, commercial garden, tree farm, orchard, park, golf course, play field or vineyard and alkali abatement.¶

(27) "Mining Water Use" means the use of water for extraction, preliminary grading, or processing of minerals or aggregate at a mining site or construction, operation and maintenance of a mining site. These uses include, but are not limited to, general construction, road construction, and dust control. Examples of mining include, but are not limited to, aggregate, hard rock, heap leach and placer mining.¶

(28) "Municipal Corporation" means any county, city, town or district as defined in ORS 198.010 or 198.180(5) that is authorized by law to supply water for usual and ordinary municipal water uses.¶

(29) "Municipal Water Use" means the delivery and use of water through the water service system of a municipal corporation for all water uses usual and ordinary to such systems. Examples of these water uses shall include but are not limited to domestic water use, irrigation of lawns and gardens, commercial water use, industrial water use, fire protection, irrigation and other water uses in park and recreation facilities, and street washing. Such uses shall not include generation of hydroelectric power.¶

(30) "Nursery Operations Use" means the use of water for operation of a commercial nursery which may include temperature control, watering of containerized stock, soil preparation, application of chemicals or fertilizers, watering within greenhouses and uses to construct, operate and maintain nursery facilities. The use of water within plant nursery operations constitutes a different use from field irrigation, although that may be a part of nursery use. If used for field irrigation for nursery stock, such use is not restricted to the defined agricultural irrigation season.¶

(31) "Off-Channel" means outside a natural waterway of perceptible extent which, during average water years, seasonally or continuously contains moving water that flows off the property owned by the applicant and has a definite bed and banks which serve to confine the water. "Off-channel" may include the collection of storm water run-off, snow melt or seepage which, during average water years, does not flow through a defined channel and does not flow off the property owned by the applicant.¶

(32) "Planned" means a determination has been made for a specific course of action either by a legislative, administrative or budgetary action of a public body, or by engineering, design work, or other investment toward approved construction by both the public and private sector.¶

(33) "Planned Uses" means the use or uses of water or land which has/have been planned as defined in this section. Such uses include, but are not limited to, the uses approved in the policies, provisions, and maps contained

in acknowledged city and county comprehensive plans and land use regulations.¶

(34) "Pollution Abatement or Pollution Prevention Water Use" means the use of water to dilute, transport or prevent pollution.¶

(35) "Power Development Water Use" means the use of the flow of water to develop electrical or mechanical power. Examples of these uses include, but are not limited to, the use of water for the operation of a hydraulic ram or water wheel and hydroelectric power production.¶

(36) "Primary Right" means the right to store water in a reservoir or the water right designated by the commission as the principle water supply for the authorized use, or if no designation has been made, the first in time or initial appropriation.¶

(37) "Proposed Certificate" means a draft version of a water right certificate describing the elements and extent of the water right developed under the terms of a permit or transfer approval order, as determined by field investigation.¶

(38) "Protest" means a written statement expressing disagreement with a proposed final order that is filed in the manner and has the content described in ORS 537.145 to 537.240.¶

(39) "Public Corporation" means a corporation which operates subject to control by a local government entity or officers of a local government and which, at least in part, is organized to serve a public purpose of, and receives public funds or other support having monetary value, from such government.¶

(40) "Quasi-Municipal Water Use" means the delivery and use of water through the water service system of a corporation other than a public corporation created for the purpose of operating a water supply system, for those uses usual and ordinary to municipal water use, or a federally recognized Indian tribe that operates a water supply system for uses usual and ordinary to a municipal water use. A quasi-municipal water right shall not be granted the statutory municipal preferences given to a municipality under ORS 537.190(2), 537.230(1), 537.352, 537.410(2), 540.510(3), 540.610(2), (3), or those preferences over minimum streamflows designated in a basin program.¶

(41) "Rate and Duty of Water for Irrigation" means the maximum flow of water in cubic feet per second or gallons per minute (instantaneous rate) and the total volume of water in acre-feet per acre per year that may be diverted for irrigation.¶

(42) "Recharge Permit" means a permit for the appropriation of water for the purpose of artificial groundwater recharge.¶

(43) "Recreation Water Use" means the use of water for play, relaxation or amusement. Examples of these uses include, but are not limited to boating, fishing, wading, swimming, and scenic values.¶

(44) "Riparian Area" means a 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, spring, bog, wet meadow, or ephemeral, intermittent or perennial stream.¶

(45) "Secondary Groundwater Permit" means a permit for the appropriation of groundwater which was stored through the exercise of a recharge permit or certificate.¶

(46) "Stockwater Use" means the use of water for consumption by domesticated animals and wild animals held in captivity as pets or for profit.¶

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

(48) "Stored Recharge Water" means groundwater which results from artificial groundwater recharge.¶

(49) "Storage Account" means a net volume of artificially recharged groundwater which is calculated for a single recharge activity from a formula specified in a single recharge permit which records additions to a groundwater reservoir by artificial recharge and depletions from a groundwater reservoir by pumping and natural losses.¶

(50) "Storm Water Management Water Use" means the use or storage of water in any structure or drainage way that is designed, constructed and maintained to collect and filter, retain or detain surface water runoff during and after a storm event for the purpose of water quality improvement, flood control or property protection. It may also include, but is not limited to, existing features such as wetlands, water quality swales, and ponds which are maintained as storm water quality facilities.¶

(51) "Stream or Riparian Area Enhancement Water Use" means the use of water to restore or enhance a stream or riparian area.¶

(52) "Supplemental Water Right or Supplemental Water Use Permit" means an additional appropriation of water to make up a deficiency in supply from an existing water right. A supplemental water right is used in conjunction with a primary water right.¶

(53) "Surplus Waters" means all waters in excess of those needed to satisfy current existing rights and minimum streamflows established by the Commission.¶

(54) "Temperature Control" means the use of water to protect a growing crop from damage from extreme temperatures.¶

(55) "Transfer" means a change of use or place of use or point of diversion of a water right.¶

(56) "Wastewater" means water that has been diverted under an authorized water right after it is beyond the control of the owner or that right but has not yet returned to the channel of a natural stream. In an irrigation district, the wastewater of an individual user is not subject to appropriation until it leaves the boundaries of the district. Wastewater abandoned to the channel of a natural stream becomes a part of that stream and is subject to appropriation.¶

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

(a) The requested surface water 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 surface water 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 surface 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.¶

(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.¶

(d) The requested groundwater source exhibits reasonably stable groundwater levels, as defined in OAR 690-008-0001; and ¶

(e) The requested groundwater use will not substantially interfere with existing rights to appropriate surface water, as per the definition of "substantial interference" in OAR 690-008-0001 and the rules governing groundwater interference with surface water in OAR 690-009-0010 through 0040; and ¶

(f) The total requested rate of groundwater allocation is obtainable by the expected yield of the well(s) proposed in the application given best available information. ¶

(58) "Water Availability Analysis" means the investigation of stream flow or groundwater measurement records, watermaster distribution records, flow requirements of existing water rights, stream flow modeling in ungauged basins, minimum perennial streamflows, or scenic waterway flow requirements to determine if water is available to support the proposed water use.¶

(59) "Water Right Subject to a Transfer" means a right established by a court decree or evidenced by a valid water right certificate, or a right for which proof of beneficial use of water under a water right permit or transfer has been submitted to and approved by the Director but for which a certificate has not yet been issued.¶

(60) "Wetland" means an area that is inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.¶

(61) "Wetland Enhancement Water Use" means the use of water to restore, create, or enhance or maintain wetland resources.¶

(62) "Wildlife Water Use" means the use of water by or for sustaining wildlife species and their habitat.

Statutory/Other Authority: ORS 536.027, ORS 537.505-537.795, ORS 537.992

Statutes/Other Implemented: ORS 536, ORS 537, ORS 539, ORS 540, 541, ORS 541, ORS 183, ORS 198

AMEND: 690-410-0070

RULE SUMMARY: Updates "principles" for groundwater allocation by incorporating the proposed rule definition of "water is available" found in Division 300; updates "principles" for groundwater allocation by clarifying that a positive finding of "water is available" is needed prior to a new groundwater allocation.

CHANGES TO RULE:

690-410-0070

Water Allocation ¶

(1) Policy. The waters of the state shall be allocated within the capacity of the resource and consistent with the principle that water belongs to the public to be used beneficially without waste. Water shall be allocated among a broad range of beneficial uses to provide environmental, economic, and social benefits. The waters of the state shall be protected from over-appropriation by new out-of-stream uses of surface water or new uses of groundwater.¶

(2) Principles. Programs to achieve the policy in section (1) of this rule shall be guided by the following principles:¶

(a) The surface waters of the state shall be allocated to new out-of-stream uses only during months or half-month periods when the allocations will not contribute to over-appropriation. However, when a stream is over-appropriated, some additional uses may be allowed where public interest in those uses is high and uses are conditioned to protect instream values;¶

(b) The groundwater of the state shall be allocated to new beneficial uses only when the ~~allocations will not contribute to the over-appropriation of groundwater sources~~ Department makes a finding that water is available for a proposed use as defined in OAR 690-300-0010. Restrictions on ~~allocations of water~~ additional appropriation for exempt groundwater uses may be considered when ~~a groundwater source is over-appropriated~~; water is not available from a groundwater source; ¶

(c) New allocations of water for the purpose of filling storage facilities may be allowed notwithstanding subsection (a) of this section. Protection may be afforded to all water rights and instream uses by establishing storage filling seasons in basin rules, by considering the need for minimum pass-through flows on water rights, or establishing by rule other conditions consistent with the state policy on water storage as a prerequisite for allocation. In setting a storage season, consideration shall be given to avoiding periods of the year when flows are low and seldom exceed the needs of water rights and when additional flows are needed to support public uses;¶

(d) A determination that a stream is over-appropriated does not affect the allocation of legally stored water from existing or future facilities;¶

(e) When surface water or groundwater is known to be contaminated, it may be allocated to new uses only if the Commission determines, after consultation with the Department of Environmental Quality (DEQ) or the Oregon State Health Division (OSHD), that the use does not pose a significant hazard to human health or the environment. Groundwater allocation may be restricted if the Department determines that use would likely result in the spread of existing groundwater contamination;¶

(f) Water shall not be allocated if the proposed use would injure the exercise of existing water rights or permits;¶

(g) The Scenic Waterways Act declares that the highest and best uses of the waters within State Scenic Waterways are fish, wildlife, and recreation. Allocations to new out-of-stream uses in State Scenic Waterways shall be consistent with the Scenic Waterways Act. Allocations to new out-of-stream uses in and above State Scenic Waterways shall not interfere with the maintenance of flow levels necessary for the purposes of Scenic Waterways;¶

(h) When instream flow needs are not protected by instream water rights, new out-of-stream allocations may be limited or conditioned to protect public uses;¶

(i) When allocating water for new uses, the Commission shall assure compliance with the Statewide Planning Goals and compatibility with local comprehensive plans in accordance with the Department's certified State Agency Coordination Program;¶

(j) When classifying allowable new uses of water or establishing reservations, the Commission shall seek consistency with management plans for public lands and resources, and with state, regional, and local resource management and economic plans;¶

(k) Conservation, storage development, water right transfers, and leases are means to maximize beneficial uses and to meet the changing needs of society and shall be encouraged and facilitated;¶

(l) Future allocation of water for out-of-basin diversions shall be allowed only if consistent with this policy and the conditions specified in existing statute and rule.

Statutory/Other Authority: ORS 536.025, ORS 536.027, ORS 536.220, ORS 536.300, ORS 537.537.505-537.795, ORS 537.992

Statutes/Other Implemented: ~~ORS 536.025, 536.220, 536.300~~, ORS 537