Oregon
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Testimony for Senate Bill 455
Senate Committee on Natural Resources
Senator Jeff Golden, Chair
Submitted by: Bryn Hudson, Legislative Coordinator
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Thank you for the opportunity to provide information related to Senate Bill 455 which directs Business Oregon to establish and administer a grant program for aquifer recharge and aquifer storage and recovery due diligence and forgivable loan program for aquifer recharge testing. This testimony is provided for informational purposes and the Department is not taking a position at this time.

Background Information

Although above-ground reservoirs are commonly thought of when it comes to water storage, groundwater aquifers can also provide options for storing water. The Department has assessed the state for geologic suitability for underground water storage. Figure 1 provides an overview of those findings.

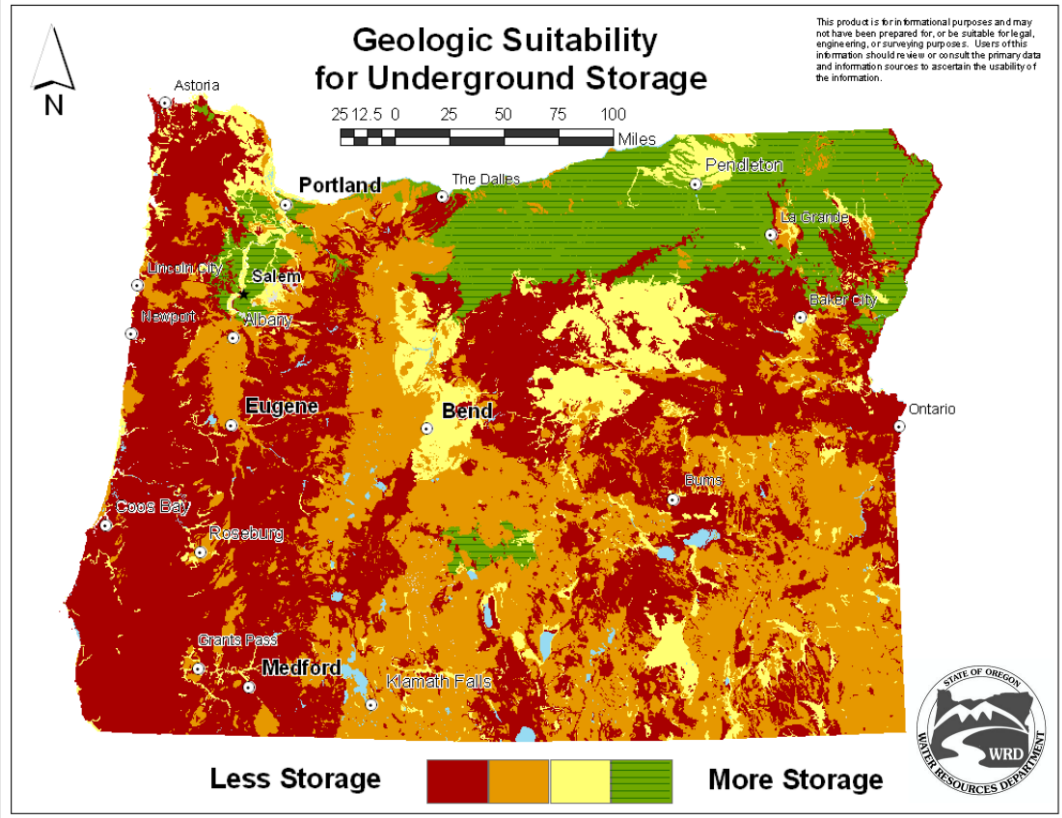

Figure 1. Geologic suitability for underground water storage in Oregon.

The Water Resources Department administers two permitting paths for underground water storage in Oregon, Artificial Groundwater Recharge and Aquifer Storage and Recovery (ORS 537.531-.534, ORS 537.135, and OAR 690-350).

Aquifer Storage and Recovery (ASR) permits allow water users to store water underground during times of low demand and then recover it through wells during high demand periods. For an ASR project, an existing water right provides the source water for storage and use of the stored water must conform to the type of use described under the existing right. ASR projects must use well injection to recharge the aquifer, and injected water must meet drinking water standards. Extensive water quality monitoring and reporting are required to protect the storage aquifer from contamination. Initially, an ASR limited license is issued for limited- duration injection and recovery testing. An ASR permit may then be issued for permanent authorization of an ASR project.

Artificial Groundwater Recharge (AR) permits provide a process for appropriating water when it is available and then storing it underground by injection through wells or infiltration through engineered surface structures. Initially, a short-term limited license for AR testing (including source water appropriation) is issued, and may be paired with a secondary limited license for AR recovery testing. Water artificially recharged to the aquifer in AR projects must meet anti-degradation standards rather than drinking water standards. Once a project has demonstrated its effects on groundwater quantity and quality, AR permits and certificates are available for permanent authorization of a project. A secondary groundwater authorization allows a project to recover the stored water through wells and put it to a beneficial use.

Department Understanding of SB 455

SB 455 creates an Aquifer Recharge Due Diligence Grant Program and an Aquifer Recharge Testing Forgivable Loan Program within Business Oregon. Figure 2 on the next page displays the location of all groundwater restricted areas; a web version can be found here. As written, the bill currently attempts to limit funding to areas of groundwater challenges (Figure 2, except it would not apply in the area in green) and does not authorize funding of projects in all areas suitable for underground storage (Figure 1).

The bill references technical documentation that must be included in a grant application, which may need to be requested from and generated by the Department. It is unclear what if any coordination or data review would be required to fully implement this. Current staffing levels within the Department's ASR/AR program are inadequate to meet current needs. Depending on the amount of funding, volume of projects, and requested involvement, this additional work could be a challenge to cover with existing staff within the Department's Groundwater Section.

There are a few sections of the bill that could use some more clarity in order to achieve its intent. Specific areas that are unclear are identified below.

Section 1(3)(c) and Section 3(5) – AR Limited licenses under ORS 537.143 and 537.144
These sections reference aquifer recharge statutes, but do not include the ASR testing rules in 537.531 through 537.534.

Section 1(4)(a) and Section 3(4)(a) – "Classified under ORS 536.340"
Classifications describe permissible uses within a basin. For areas experiencing groundwater issues, the Department may limit the types of uses allowed for new permits in the basin. For more clarity, consider modifying to say areas "where groundwater uses are restrictively classified under ORS 536.340."

Section 1(4)(c) and section 3(4)(c) – "Designated as critical under ORS 537.730 to 537.740"
The critical groundwater area statutes have changed over time (ORS 537.730 to 537.740). Future critical groundwater areas will be established by rule, whereas existing critical groundwater areas were established by order. In order to ensure that future and existing critical groundwater areas would be eligible, consider describing these as "Any critical groundwater area established by Department rule or order."

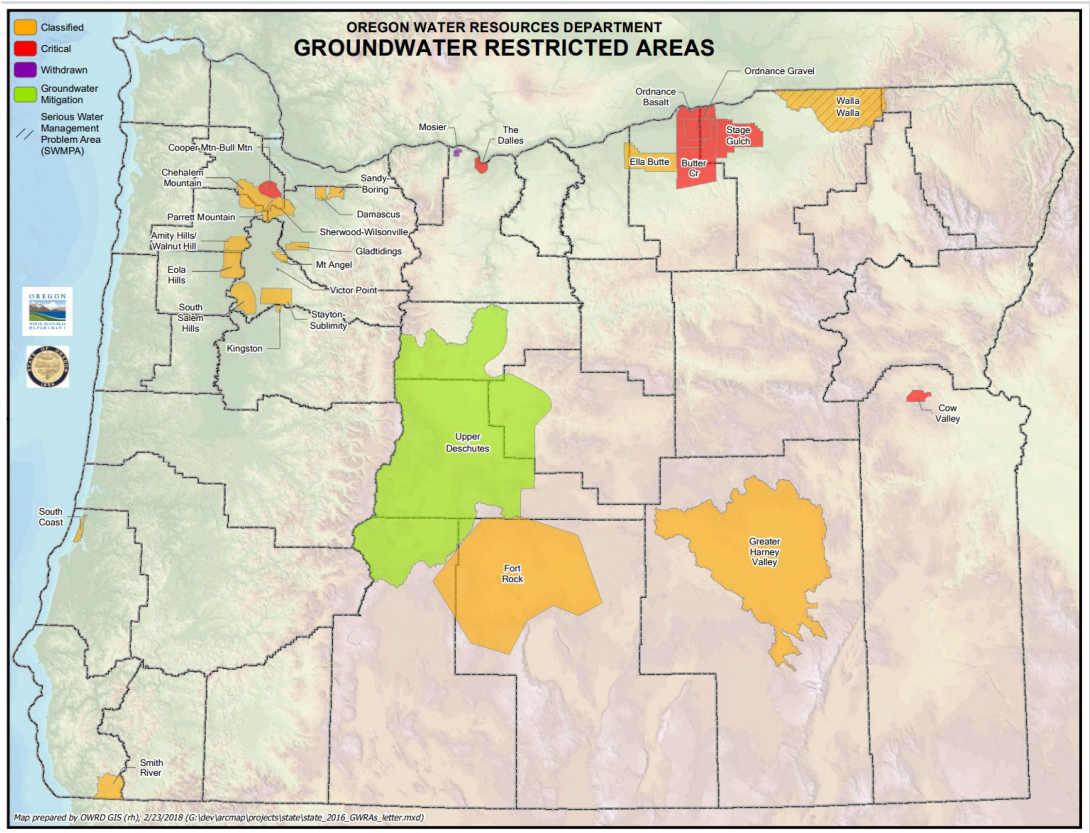

Figure 2. Groundwater restricted areas in Oregon. This includes areas with restrictive classifications, serious water management problem areas, critical groundwater areas, groundwater mitigation areas, and areas where water has been withdrawn from allocation. A web version of this map can be found here. The bill would not apply to the area in green as currently written, but would likely apply to the other areas in orange, red, and purple.