FILED
FEB 12 1996
ARCHIVES DIVISION
SECRETARY OF STATE

CERTIFICATE AND ORDER FOR FILING PERMANENT ADMINISTRATIVE RULES WITH THE SECRETARY OF STATE

I hereby certify that the attached copy is a true, full and correct copy of PERMANENT rule(s) adopted on January 26, 1996 by the Water Resources Commission to become effective upon filing.

The matter having come before the Water Resources Commission after all procedures having been in the required form and conducted in accordance with applicable statutes and rules and being fully advised in the premises:

Notice of Intended Action published in the Secretary of State's Bulletin: ___ No X Yes
Date Published: November 1, 1995

NOW, THEREFORE, IT IS HEREBY ORDERED THAT the following action be taken: (List INDIVIDUAL Rule Number(s) on the appropriate line below).

ADOPTED: 690-350-010, 690-350-020, 690-350-030, 690-350-110
AMENDED: n/a
REPEALED: n/a
RENUM. TO.: 690-11-042 to 690-350-120; 690-11-044 to 690-350-130
AMENDED AND RENUMB. To: n/a

as the Administrative Rules of the Water Resources Commission
Dated this 9th day of February, 1996.

By: Marcia D. Pfeil

Title: Director

STATUTORY AUTHORITY: ORS 536.027, ORS Chapter 537, House Bill 3183 (1995)
OTHER AUTHORITY:
STATUTES BEING IMPLEMENTED: HB 3183 (1995)
SUMMARY:

These new rules relate to the licensing of test programs for aquifer storage and recovery (ASR) and the permitting and administration of ASR projects. The rules detail the application, processing and conditioning for the limited license and permanent permits. Due to the vacating of OAR Chapter 690, Division 11, certain definitions related to artificial groundwater recharge are included in the new Division 350 with minor amendment. Other rules related to artifical groundwater rechange have been renumbered and are also included in the new rules.

For further information, contact
RULES COORDINATOR: Beth Patrino Phone: 378-8455, ext. 299

RECEIVED
FEB 12 1996
WATER RESOURCES DEPT.
SALEM, OREGON

CERTIFICATE AND ORDER FOR FILING PERMANENT ADMINISTRATIVE RULES WITH THE SECRETARY OF STATE

I hereby certify that the attached copy is a true, full and correct copy of PERMANENT rule(s) adopted on January 26, 1996 by the Water Resources Commission to become effective upon filing.

The matter having come before the Water Resources Commission after all procedures having been in the required form and conducted in accordance with applicable statutes and rules and being fully advised in the premises:

Notice of Intended Action published in the Secretary of State's Bulletin: ___ No _X_ Yes
Date Published: November 1, 1995

NOW, THEREFORE, IT IS HEREBY ORDERED THAT the following action be taken: (List INDIVIDUAL Rule Number(s) on the appropriate line below).

ADOPTED: 690-350-010, 690-350-020, 690-350-030, 690-350-110
AMENDED: n/a
REPEALED: n/a
RENUM. TO.: 690-11-042 to 690-350-120; 690-11-044 to 690-350-130
AMENDED AND RENUMB. To: n/a

as the Administrative Rules of the Water Resources Commission
Dated this 9th day of February, 1996.

By: Marshall D. Pagel

Title: Director

STATUTORY AUTHORITY: ORS 536.027, ORS Chapter 537, House Bill 3183 (1995)
OTHER AUTHORITY:
STATUTES BEING IMPLEMENTED: HB 3183 (1995)
SUMMARY:

These new rules relate to the licensing of test programs for aquifer storage and recovery (ASR) and the permitting and administration of ASR projects. The rules detail the application, processing and conditioning for the limited license and permanent permits. Due to the vacating of OAR Chapter 690, Division 11, certain definitions related to artificial groundwater recharge are included in the new Division 350 with minor amendment. Other rules related to artifical groundwater rechange have been renumbered and are also included in the new rules.

For further information, contact
RULES COORDINATOR: Beth Patrino Phone: 378-8455, ext. 299

DIVISION 350

AQUIFER STORAGE AND RECOVERY (ASR) AND ARTIFICIAL GROUNDWATER RECHARGE

Aquifer Storage and Recovery (ASR)

ASR General Provisions

690-350-010 (1) Definitions. The following definitions apply to aquifer storage and recovery in OAR Chapter 690, Division 350, Rules 010 to 030:

(a) "Aquifer Storage and Recovery" (ASR) means the storage of water from a separate source that meets drinking water standards in a suitable aquifer for later recovery and not having as one of its primary purposes the restoration of the aquifer (ORS 537.531). (Applications to obtain limited licenses or permits for ASR uses submitted pursuant to OAR 690-350-010 to 690-350-030 are not subject to provisions governing artificial groundwater recharge projects or programs pursuant to OAR 690-350-110 to 690-350-130.)

(b) "Commission" means the Water Resources Commission.

(c) "Department" means the Water Resources Department.

(d) "DEQ" means the Department of Environmental Quality.

(e) "Director" means the Water Resources Director.

(f) "HD" means the Oregon Health Division.

(g) "Injection Source Water" means the water which may be injected under terms of an ASR limited license or permit.

(h) "Receiving Aquifer" means the aquifer into which water may be injected under terms of an ASR limited license or permit.

(i) "Recovered Water" means water which is recovered from storage under terms of an ASR limited license or permit.

(j) "Stored Water" means water which is stored in a receiving aquifer under terms of an ASR limited license or permit.

(2) Limited License for ASR Testing. The use of water for ASR testing purposes requires a limited license pursuant to ORS 537.534. A limited license pursuant to ORS 537.143 does not apply. Only after completion of an ASR testing program under a limited license may an applicant apply for a permanent ASR permit. A limited license application may propose ASR testing for a single well or same-aquifer wells in a wellfield. The limited license may allow for a beneficial use of the recovered water. If the limited license is based on a water right for injection source water, the limited license shall require the same use as the water right, but may allow a rate of injection which is no greater than that of the water right and a rate of recovery which is greater than that of the water right.

(3) Inherent to Water Rights. ASR is a beneficial use inherent in all water rights for other beneficial uses (ORS 537.531). Applicable water rights are either permits or certificates. ASR use under this inherent nature is accessed temporarily under an ASR limited license or permanently through an ASR

permit. The use of water under a water right as injection source water for an ASR project up to the limits allowed in the ASR permit neither affects the priority date of the water right, nor changes the use permitted upon its recovery from the use permitted by the water right for injection source water, nor otherwise affects the water right. ASR permits may allow rates of injection which are no greater than those of the water right for injection source water and rates of recovery which are greater than those of the water right for injection source water.

(4) Separate Processes for Water Right and ASR Permit. An ASR permit does not allow an appropriation of water but does allow ASR to occur with a water right. The water right application process rules in OAR Chapter 690, Division 310 do not apply to ASR application processing. The public interest review standards for an ASR permit shall apply only to the matters raised by the ASR application, not to the water right for the injection source water. An ASR permit may allow ASR storage through a single well or same-aquifer wells in a wellfield. If a new water right is needed as part of the ASR project, the new water right application shall be subject to the same standards as any new water right application.

(5) Use Described by Water Right. The use of recovered water under an ASR permit shall be the same as the use described by the water right permit or certificate for injection source water. The holder of a permit for ASR shall apply for a transfer under procedures set out in OAR 690-15 if the use of recovered ASR water is different from that which is allowed in the water right permit or certificate for the injection source water.

(6) Water Quality. Water quality is a major consideration in ASR activities and all of the following provisions apply:

(a) Injection source water for ASR shall comply with drinking water standards, treatment requirements, and performance standards established by the HD under OAR 333-61-030 and 032 (ORS 448.131 and .273) or the maximum measurable levels established by the Environmental Quality Commission under OAR 340-40 (ORS 468B.165), whichever are more stringent. The injection of such water into aquifers under an ASR limited license or permit shall be exempt from the requirement to obtain a discharge permit under ORS 468B.050 or a concentration limit variance from the DEQ;

(b) Conditions shall be placed on the limited license or permit to minimize, to the extent technically feasible, practical and cost-effective, the concentration of constituents in the injection source water that are not naturally present in the aquifer;

(c) No limited license or permit may establish concentration limits for water to be injected in excess of standards established by HD or the maximum measurable levels established by the Environmental Quality Commission under OAR 340-40 (ORS 468B.165), whichever are more stringent;

(d) Except as otherwise provided in (6)(e) of this rule, if the injection source water contains constituents regulated under OAR 333-61-030 (ORS 448.131 and .273) or OAR 340-40 (ORS 468B.165) that are detected at greater than 50 percent of the established levels, the ASR limited license or permit may

require the permittee to employ technically feasible, practical and cost-effective methods to minimize concentrations of such constituents in the injection source water;

(e) Constituents that have a secondary contaminant level or constituents that are associated with disinfection of the water may be injected into the aquifer up to the standards established under OAR 333-61-030 (ORS 448.131 and .273);

(f) The Department may, based upon valid scientific data, further restrict certain constituents in the injection source water if the Department finds the constituents will interfere with or pose a threat to the maintenance of the water resources of the state for present or future beneficial uses.

(7) Oversight of ASR Projects. The Department is the sole licensing and permitting agency for ASR projects. However, other state agencies and local governments have a role as follows:

(a) The Department shall seek DEQ and HD assistance in the administration of the ASR program, including recommending conditions to be included in the limited license and permit;

(b) ASR activities under a limited license or permit are subject to conformance with land use laws and may be located within or outside an urban growth boundary;

(c) The disposal of recovered ASR testing water may require discharge authorization from DEQ. All applicants should investigate this possibility;

(d) Applicants that are public water systems as defined by the HD (OAR 333-61-020 (68)) shall comply with the HD's construction standards (OAR 333-61-050) and plan submission and review requirements (OAR 333-61-060).

(8) Percent Recovery of Stored Water. In addition to other conditions, the limited license or permit shall specify the amount of stored water that may be recovered. The Department may allow up to 100 percent of the stored water to be recovered if data analysis demonstrates that the injected source water is not lost through migration or other means and that groundwater otherwise present in the aquifer has not been irretrievably lost as a result of ASR.

(9) Appeal of Administrative Action. Any order of the Director related to ASR limited licenses is subject to administrative reconsideration as provided in the Administrative Procedures Act (ORS Chapter 183) and judicial review as provided in ORS 536.075. Orders of the Director related to ASR permits are subject to administrative reconsideration as provided in the Administrative Procedures Act (ORS Chapter 183) and judicial review as provided in ORS 536.075.

(10) Groundwater Protection. To reduce the potential for contamination of stored water, ASR operators are encouraged to consider the protection of their groundwater supply through the development of a Wellhead Protection plan or other appropriate groundwater protection plan.

Stat. Auth.: ORS 536.027 and 537.534
Stats. Implemented: ORS 537.531 - 537.534

ASR Testing under Limited License

690-350-020 (1) Testing Purposes. To store and use water injected into an aquifer for aquifer storage and recovery testing purposes requires a limited license. Only after completion of an ASR testing program under a limited license may an applicant apply for a permanent ASR permit. The testing approach shall be designed to provide information as needed to evaluate the ultimate capacity anticipated for the project. The limited license may allow for a beneficial use(s) of the recovered water.

(2) Pre-application Conference. The Department requires at least one pre-application conference with a prospective licensee prior to filing an application requesting the right to use water under a limited license for ASR testing. The purpose of the conference is to describe and discuss the processes and requirements which the Department associates with water storage and recovery in the ASR Program. The conference may serve as a point of review for the apparent adequacy of the applicant's hydrogeologic and other information. The Department shall invite personnel from both the DEQ and HD to the conference.

(3) Limited License Application. A request for a limited license for a period of up to five years shall be submitted on a form provided by the Department. The application shall consist of the following:

(a) Information on, and Attachments to, the Form:

(A) Name, address, and telephone number of the applicant;

(B) The proposed source for injection water, maximum diversion rate, maximum injection rate at each well(s), maximum storage volume, maximum storage duration, and maximum withdrawal rate at each well(s);

(C) License Duration. The term or duration for which the limited license is sought;

(D) Proposed Use or Disposal of Recovered Water. The proposed beneficial use or the intended disposal method for the recovered water. In the event of contingencies which preclude the beneficial use, the application should propose an alternate use or disposal. If an existing water right is cited in the application for the injection source water, the use of the recovered water shall be the same as that allowed under the existing water right;

(E) Ultimate Project Size. The ultimate capacity anticipated for the final project to be tested including the proposed source for injection water, maximum diversion rate, maximum injection rate at each well(s), maximum storage volume, maximum storage duration, and maximum withdrawal rate at each well(s);

(F) Water Availability or Water Right Statement. Access to water shall be evidenced by a completed water availability statement from the local watermaster on forms provided by the Department, results from the Department's water availability model or citation of the existing water right (permit or certificate) which is available for use in ASR testing under the limited license;

(G) Water Right Holder Agreement. If the applicant is not the holder of the water right for the proposed ASR testing as may be cited in (F) above, a statement from the water right holder shall indicate permission for use of the

water for ASR testing;

(H) Legal Land Use. Evidence that land use and development approval from a local government is sought, obtained, or unnecessary;

(I) Map. A site map of reproducible quality, drawn to a standard, even scale of not less than 2 inches = 1 mile, showing:

(i) The locations of all proposed points of diversion, injection wells, recovery wells, and observation wells for the limited license and the final project referenced by coordinates or by bearing and distance to the nearest established or projected public land survey corner;

(ii) The general stream course of the source for the proposed use, if applicable;

(iii) Other topographical features such as roads, streams, railroads, etc., which may be helpful in locating the diversion points in the field.

(J) Applicants that are public supply systems as defined by the Health Division (OAR 333-61-020(68)) shall acknowledge the need to comply with the Health Division's plan submission and review requirements (OAR 333-61-060);

(K) Other Information. The applicant shall provide any other information the Department believes necessary to evaluate the ASR testing.

(b) Supplemental Reports:

(A) Proposed ASR Test Program. The proposed testing program shall include injection rates and schedules, water storage volumes, the injected water storage durations, recovery rates and schedule, water quality sampling including a quality assurance and quality control plan, water level monitoring including location of observation wells, contingency plan for use of recovered water if the intended use not possible, information on the anticipated final project (scope and conceptual design), and testing report outline. (A licensed professional will be required to develop this information as required by Oregon law.);

(B) Proposed System Design. The proposed system design package shall include well construction information for any injection, recovery, observation and source wells, the wellhead assembly, piping system for injection and recovery, and other conceptual design components of the system. (A licensed professional will be required to develop this information as required by Oregon law.);

(C) Groundwater Information. Preliminary hydrogeologic information shall include the local geology, a conceptual hydrogeologic model, a description of the aquifer targeted for storage, estimated flow direction and rate of movement, allocation of surface water, springs or wells within the area affected by ASR wells, rationale for estimating the affected area, anticipated changes to the groundwater system due to the proposed ASR testing, potential natural resource problems of testing, and other information on groundwater and surface water conditions antecedent to ASR for basing recovery estimations. (A licensed professional will be required to develop this information as required by Oregon law. (ORS 672.505-705));

(D) Quality of Source Water. The applicant shall provide information regarding the quality and treatment of the proposed injection source water relevant to the proposed injection time of year for:

(i) Regulated constituents with maximum contaminant levels under OAR 333-61-030 (test results from a laboratory approved by the HD (OAR 333-61-036));

(ii) Unregulated constituents under OAR 333-61-036 (test results from a laboratory approved by the HD (OAR 333-61-036));

(iii) Constituents with maximum measurable levels established under OAR 340-40 (ORS 468B.165) (test results from a laboratory approved by the HD (OAR 333-61-036));

(iv) Compliance with treatment requirements and performance standards for source waters that fall in categories identified in OAR 333-61-032;

(v) Common ion constituents and water quality parameters to include: alkalinity or bicarbonate, calcium, magnesium, iron, manganese, sodium, potassium, chloride, sulfate, silica, total dissolved solids, pH, redox potential and temperature;

(vi) Other constituents as required by the Department.

(E) Comments on Source Water/Standards. The applicant shall address the following situations as they apply:

(i) If a constituent that is regulated under OAR 333-61-030 (ORS 448.131 and .273) or OAR 340-40 (ORS 468B.165) is detected in the source water, the applicant shall demonstrate that there are not other sources of water available to the applicant which would be satisfactory for injection and lower in the constituent of concern;

(ii) If a constituent is detected in the source water above 50% of the levels established under OAR 333-61-030 (ORS 448.131 and .273) or OAR 340-40 (ORS 468B.165), the applicant shall install a treatment method, system or other alternative method to reduce the constituent to less than 50% of those levels, unless the applicant can show that there is not a treatment method, system or other alternative method that will reduce the level of a contaminant below the 50% level, or the lesser of:

(I) The applicant can show that it would be more costly to provide the treatment method, system or other alternative method necessary than to obtain the same amount of stored water from the next cheapest feasible water supply alternative; or

(II) In the case of a drinking water system the applicant can show the cost of adding the treatment method, system or other alternative method increases the cost per household of providing water (including operation, maintenance, and debt service for prior water projects) above 1.5% of the median household income of the community.

(iii) Notwithstanding (3)(b)(E)(ii) of this rule, in the event the applicant cannot reduce a constituent to less than the 50% level, the applicant shall minimize the constituent level by providing the level of treatment available or other alternative method which for the same amount of stored water is not as costly as either the next cheapest water supply alternative or an amount equal to that necessary to increase the cost per household of providing water to 1.5% of the median household income of the community, whichever is less;

(iv) Notwithstanding the provisions of 690-350-020(3)(b)(E)(i), (ii) and (iii)

of this rule and after consulting with the DEQ and the HD, the Department may determine that the circumstances are such that an alternative source, treatment method, system, or other alternative method is acceptable or not necessary.

(F) Quality of Receiving Aquifer Water. The applicant shall provide information regarding the quality of the receiving aquifer water for:

(i) Regulated constituents with maximum contaminant levels under OAR 333-61-030 (test results from a laboratory approved by the HD (OAR 333-61-036));

(ii) Unregulated constituents under OAR 333-61-036 (test results from a laboratory approved by the HD (OAR 333-61-036));

(iii) Constituents with maximum measurable levels established under OAR 340-40 (ORS 468B.165) (test results from a laboratory approved by the HD (OAR 333-61-036));

(iv) Common ion constituents and water quality parameters to include: alkalinity or bicarbonate, calcium, magnesium, iron, manganese, sodium, potassium, chloride, sulfate, silica, total dissolved solids, pH, redox potential and temperature;

(v) Other constituents as required by the Department.

(G) Comments on Compatibility. The applicant shall evaluate the compatibility of the injection source water and receiving aquifer water for possible changes in aquifer characteristics due to hydrogeologic or hydrogeochemical changes.

(c) Other Information. Any other information required by the Department.

(4) Limited License Application Processing:

(a) Review of Application for Completeness. Within 45 days after an individual submits or resubmits an application, the Department shall consult with DEQ and HD about the completeness of the application, determine the completeness of the application, and either:

(A) Notify the applicant that it is complete for purposes of evaluation; or

(B) Notify the applicant of what additional information is required before the application is resubmitted.

(b) Public Notice/Comment Period. Within 7 days after determining that an application is complete, the Department shall provide public notice of the request to the public in the same manner as is used for other water use applications. The appearance in the public notice commences a 30-day public comment period for the application. The Department may require additional information from the applicant pursuant to its own concerns and those raised by the public comments;

(c) DEQ and HD Assistance. The Department shall rely on the DEQ and the HD to comment on and recommend conditions for the limited license and shall provide the public notice and a copy of the complete application to those agencies at the opening of the comment period;

(d) Director's Action on the Application. The Director shall consider comments and recommendations received during the public comment period, and shall:

(A) Issue the license with proper conditions upon finding that:

(i) The proposed ASR testing will not impair or be detrimental to the public interest;

(ii) The proposed ASR testing will produce information that will adequately describe the water quality and quantity response in the aquifer and at nearby wells and springs due to ASR activities; and

(iii) The proposed use will not expand the use under an existing water right; or

(B) Deny the application upon finding that the ASR testing will impair the public interest or will not adequately produce information that will describe the water quality and quantity response in the aquifer and at nearby wells and springs due to ASR activities.

(e) Starting January 1, 1997, the actions outlined in (4)(d) of this rule shall occur within 60 days of the close of the comment period;

(f) The Department shall send a copy of the final order to commentors.

(5) Limited License Conditioning. A limited license shall contain the following conditions:

(a) Test Plan Authorization. The limited license shall authorize an ASR test plan which includes the source for injection water, the maximum diversion rate from the source, the maximum injection rate at each well(s), the maximum storage volume, the maximum storage duration, and the maximum recovery rate at each well(s);

(b) Duration. The Director may issue a limited license for ASR purposes for a term of not more than five years;

(c) License Renewal. The limited license may be renewed if the applicant demonstrates to the Director's satisfaction that further testing is necessary and that the applicant complied with the terms of the limited license. The Department shall offer an additional public comment opportunity prior to renewing the limited license. The standards, findings and process used in the license renewal process shall be as provided in OAR 690-350-020 and, as a condition of renewal, the Department may further condition the license consistent with the requirements of this rule;

(d) Notice Prior to Injection and Recovery. The licensee shall give notice, in writing, to the watermaster not less than 15 days in advance of initiating injection under the limited license and recovering stored water. The injection notice shall include the limited license number, the location of the injection source water diversion, the quantity of water to be diverted from that source, the time of injection, and the place of injection. The recovery notice shall include the limited license number, the location of the recovery well(s), the time of recovery, and the quantity of water to be recovered;

(e) Record of Use. The permittee shall maintain a record of injection and recovery, including the total number of hours of injection and recovery and the total metered quantity injected and recovered. The record of use may be reviewed by Department staff upon request;

(f) Modification/Revocation. The Department shall notify the licensee in writing when the Director either considers modifying or revoking the limited

license and allow the licensee to respond:

(A) The Director may modify the ASR limited license for any of the following reasons:

(i) to reflect changes in HD and DEQ water quality or treatment standards;

(ii) to address needed technological changes as requested by DEQ or HD to minimize constituents regulated under OAR 333-61-030 (ORS 448.131 and .273) or OAR 340-40 (ORS 468B.165);

(iii) upon written request from the applicant for minor adjustments to the authorization in the limited license.

(B) The Director may revoke or modify the ASR limited license for any of the following reasons:

(i) to prevent or mitigate injury to other water rights, minimum perennial streamflows or aquifer water quality; or

(ii) to address any other unintended, injurious effects of the ASR activity.

(C) The Department may offer an additional public comment opportunity consistent with the notice and comment provisions of OAR 690-350-020 prior to modifying the limited license.

(g) Priority/Protection. A limited license does not receive a priority date and is not protected under ORS 540.045;

(h) Compliance with Other Laws. The injection of acceptable water into an aquifer(s) under the limited license shall comply with all applicable local, state or federal laws;

(i) Water Quality Conditions:

(A) The limited license shall include conditions to minimize, to the extent technically feasible, practical and cost-effective, the concentration of constituents in the injection source water that are not naturally present in the aquifer;

(B) Except as otherwise provided in (5)(i)(C) of this rule, if the injection source water contains constituents regulated under OAR 333-61-030 (ORS 448.131 and .273) or OAR 340-40 (ORS 468B.165) that are detected at greater than 50 percent of the established levels, the aquifer storage and recovery limited license may require the licensee to employ technically feasible, practical and cost-effective methods to minimize concentrations of such constituents in the injection source water. The Department, in consultation with DEQ and HD, may set specific limits between 50 and 100% of the established level for constituents regulated under OAR 333-61-030 (ORS 448.131 and .273) or OAR 340-40 (ORS 468B.165) as provided by the standards in (3)(b)(E) of this rule;

(C) Constituents that have a secondary contaminant level or constituents that are associated with disinfection of the water may be injected into the aquifer up to the standards established under OAR 333-61-030 (ORS 448.131 and .273);

(D) The Department may, based upon valid scientific data, further limit certain constituents in the injection source water if the Department finds that those constituents will interfere with or pose a threat to the maintenance of the water resources of the state for present or future beneficial uses;

(E) The licensee shall be in compliance with treatment requirements and performance standards for source waters identified in OAR 333-61-032;

(F) If during the course of ASR testing a constituent which is regulated under OAR 333-61-030 (ORS 448.131 and .273) or OAR 340-40 (ORS 468B.165) is detected above the level prescribed in the limited license, the licensee shall stop injection activities and notify the Department.

(j) Monitoring/Sampling/Recovery/Reporting. The limited license shall include conditions for reporting and monitoring the ASR project aquifer impacts and for constituents reasonably expected to be found in the injection source water. The Department may attach conditions to the limited license regarding sampling and rates of recovery up to 100 percent of the injection quantity. (Data collected under these provisions may be useful in consideration of modifications to the limited license.);

(k) Protection for Existing Users. The limited license shall be conditioned to protect existing water rights and the water quality of existing users that rely upon the receiving aquifer and the injection source water;

(l) Use of Recovered Water. If the limited license proposes to recover water injected under an existing water right, the use of the recovered water shall be for the use cited in the water right. If the limited license is not predicated on an existing water right, the limited license may authorize a use(s) for the recovered water;

(m) Other Conditions. The limited license may contain any other conditions required by the Department to protect the public welfare, health, and safety.

Stat. Auth.: ORS 536.027 and 537.534
Stats. Implemented: ORS 537.531 - 537.534

ASR under ASR Permit

690-350-030 (1) ASR Permit Required. On-going authorization to store and recover water injected into an aquifer requires an ASR permit. Only after completion of an ASR testing program under a limited license may an applicant apply for a permanent ASR permit.

(2) Water Right before ASR Permit. A person shall possess a water right or have a water right holder agreement which allows use of a water right for the injection source water before applying for an ASR permit. This water right shall be either a permit or certificate.

(3) Pre-application Conference. The Department requires at least one pre-application conference with a prospective permittee prior to filing an ASR permit application. The purpose of the conference is to discuss the ASR testing results, information needed for the application, and possible constraints on a project. The conference may serve as a point of review for the apparent adequacy of the applicant's hydrogeologic and other information. The Department shall invite personnel from both the DEQ and HD to the conference.

(4) Permit Application. A request for an ASR permit shall be submitted on a form provided by the Department. The application shall consist of the following:

(a) Information on, and Attachments to, the Form:

(A) Name, address and telephone number of the applicant;

(B) The proposed source for injection water, maximum diversion rate, maximum injection rate at each well(s), maximum storage volume, maximum storage duration, and maximum withdrawal rate at each well(s);

(C) Identification of Water Right for Injection Source Water. The water right(s) for which the ASR permit is sought;

(D) Water Right Holder Agreement. If the applicant is not the holder of the water right for the proposed ASR project as cited in (C) above, a statement from the water right holder shall indicate permission for use of the water for ASR;

(E) Limited License(s) Used for Testing. The limited license which was issued to perform the ASR testing necessary for this application;

(F) Legal Land Use. Evidence that land use and development approval from a local government is obtained or unnecessary;

(G) Map. The map submitted with the ASR application shall be prepared by a certified water right examiner and meet the following criteria:

(i) The application map, which is made part of the record, shall be of permanent quality and drawn with sufficient clarity so as to be easily reproduced;

(ii) The map shall be drawn on vellum or mylar except that maps measuring 11" x 17" or smaller may be prepared on good-quality paper. The map shall be drawn to a standard, even scale of not less than 4 inches = 1 mile. A small area map may be more easily and clearly drawn to a larger scale, such as 1 inch = 400 feet;

(iii) The map shall show clearly the location of each injection source water diversion point, or well, by reference to a recognized public land survey corner. The locations may be shown by distance and bearing or by coordinates (distance north or south and distance east and west from the corner);

(iv) The map shall show clearly the location of main canals, ditches, pipelines, or flumes which are used to transport injection source water to the injection well(s);

(v) The map shall show clearly the location of the well(s) where water is to be injected;

(vi) The map shall show clearly the location of the well(s) where water is to be recovered;

(vii) The map shall show clearly the location of observation well(s);

(viii) The map shall show clearly other topographical features such as roads, streams, railroads, etc., which may be helpful in locating the diversion points in the field; and

(ix) The map shall show clearly the scale to which the map is drawn, the section number, township, and range, and a North directional symbol.

(H) Applicants that are public supply systems as defined by the Health Division (OAR 333-61-020(68)) shall acknowledge the need to comply with the Health Division's plan submission and review requirements (OAR 333-61-060);

(I) Other Information. Any other information required by the

Department.

(b) Supplemental Reports:

(A) Proposed ASR Operations. A detailed description of proposed ASR operations shall include a description of the proposed manner of ASR operations including injection rates specific to each well, water storage volumes, injected water storage durations, recovery rates at each well, water level monitoring including a quality assurance and quality control plan, water quality sampling, contingency plan for use of recovered water if the intended use isn't possible and reporting. (A licensed professional will be required to develop this information as required by Oregon law.);

(B) Proposed System Design. The proposed system design package shall include well construction information for any injection, recovery, observation and source wells, the wellhead assembly, piping system for injection and recovery, and other conceptual design components of the system. (A licensed professional will be required to develop this information as required by Oregon law.);

(C) Test Report. The results of testing under the limited license, including:

(i) Quality of Injection Source Water. Test results of the quality of the injection source water as required in the test plan proposal under the limited license;

(ii) Quality of Receiving Aquifer Water. Test results of the quality of the aquifer water as required in the test plan proposal under the limited license;

(iii) Quality of Recovered Water. Test results of the quality of the recovered aquifer water as required under the limited license;

(iv) Groundwater Information. Hydrogeologic information shall include the local geology, a conceptual hydrogeologic model, a description of the aquifer targeted for storage, estimated flow direction and rate of movement, allocation of surface water, springs or wells within the area affected by ASR wells, rationale for estimating the affected area, anticipated changes to the groundwater system due to the proposed ASR project, potential natural resource problems of testing, and other information on groundwater and surface water conditions for basing recovery estimations. (A licensed professional will be required to develop this information as required by Oregon law. (ORS 672.505-705));

(D) Comments on Source Water/Standards. The applicant shall address the following situations as they apply:

(i) If a constituent that is regulated under OAR 333-61-030 (ORS 448.131 and .273) or OAR 340-40 (ORS 468B.165) is detected in the source water, the applicant shall demonstrate that there are not other sources of water available to the applicant which would be satisfactory for injection and lower in the constituent of concern. Other sources are limited to those for which the applicant has water rights;

(ii) If a constituent is detected in the source water above 50% of the levels established under OAR 333-61-030 (ORS 448.131 and .273) or OAR 340-40 (ORS 468B.165), the applicant shall install a treatment method, system or other alternative method to reduce the constituent to less than 50% of those levels,

unless the applicant can show that there is not a treatment method, system or other alternative method that will reduce the level of a contaminant below the 50% level, or the lesser of:

(I) The applicant can show that it would be more costly to provide the treatment method, system or other alternative method necessary than to obtain the same amount of stored water from the next cheapest feasible water supply alternative; or

(II) In the case of a drinking water system the applicant can show the cost of adding the treatment method, system or other alternative method increases the cost per household of providing water (including operation, maintenance, and debt service for prior water projects) above 1.5% of the median household income of the community.

(iii) Notwithstanding (4)(b)(D)(ii) of this rule, in the event the applicant cannot reduce a constituent to less than the 50% level, the applicant shall minimize the constituent level by providing the level of treatment available or other alternative method which for the same amount of stored water is not as costly as either the next cheapest water supply alternative or an amount equal to that necessary to increase the cost per household of providing water to 1.5% of the median household income of the community, whichever is less;

(iv) Notwithstanding the provisions of 690-350-030(4)(b)(D)(i), (ii), and (iii) of this rule and after consulting with the DEQ and the HD, the Department may determine that the circumstances are such that an alternative source, treatment method, system, or other alternative method is acceptable or not necessary.

(c) Other Information. Any other information required by the Department.

(5) Permit Application Processing:

(a) Review of Application for Completeness. Within 45 days after an individual submits or resubmits an application, the Department shall consult with DEQ and HD about the completeness of the application, determine the completeness of the application, and either:

(A) Notify the applicant that it is complete for purposes of evaluation; or

(B) Notify the applicant of what additional information is required before the application is resubmitted.

(b) Public Notice/Comment Period. Within 7 days after determining that an application is complete, the Department shall provide public notice of the request to the public in the same manner as is used for water use applications. The appearance in the public notice commences a 60-day public comment period for the application. The Department may require additional information from the applicant pursuant to its own concerns and those raised by the public comments;

(c) DEQ and HD Assistance. The Department shall rely on the DEQ and the HD to comment on and recommend conditions for the permit and shall provide the public notice and a copy of the complete application to those agencies at the opening of the comment period;

(d) Scope of Public Interest Review. When making a public interest

determination, the Department shall receive comments from interested parties or agencies for consideration of permit issuance, proposed conditions, and limitations. The public interest review standards shall apply only to the matters raised by the ASR permit application, not to the water right for injection source water;

(e) Referral to Commission. In the discretion of the Director, the Director may refer policy matters raised by the ASR application to the Commission for decision;

(f) Proposed Final Order. After considering comments and/or recommendations specific to the proposed ASR project during the 60-day public comment period, the Director shall issue a proposed final order on the application. The proposed final order shall be mailed to the applicant, commenting agencies, and commentors. Notice of the proposed final order shall be given in the weekly notice published by the Department;

(g) Protests:

(A) The Department shall allow a 45-day protest period, starting when the proposed final order is noticed in the public notice;

(B) Protests may be filed by any person objecting to the proposed issuance of a permit, and by any applicant objecting to proposed permit conditions;

(C) Protests shall be in the form and manner specified in OAR Chapter 690, Division 2.

(h) Director's Action on the Application. After the close of the protest period and after consideration of any protest filed, the Director may:

(A) Issue the permit with proper conditions upon finding that:

(i) The proposed ASR project will not impair or be detrimental to the public interest; and

(ii) There is a water right for injection source water.

(B) Propose to deny the application and refer to contested case hearing upon finding that the ASR project will impair or be detrimental to the public interest;

(C) Offer the applicant and protester(s) the opportunity to engage in discussions to try and resolve issues of concern;

(D) Refer to contested case hearing to consider protests against approval of the application or protests against proposed permit conditions; or

(E) Refer the application to the Commission to address policy matters raised by the application.

(i) The Department shall send a copy of the final order to commentors and protesters.

(6) Permit Conditioning. The following conditions shall be placed on the ASR permit:

(a) Injection/Storage/Recovery. The permit will specify the maximum allowable injection rate at each well, the maximum allowable storage volume, the maximum storage duration and the maximum allowable recovery rate at each well. These maximum values shall substantially reflect those amounts which were successfully demonstrated under the limited license;

(b) Record of Use. The permittee shall maintain a record of injection and

recovery, including the total number of hours of injection and recovery and the total metered quantity injected and recovered. The record of use may be reviewed by Department staff upon request;

(c) Permit Modification/Revocation. The Department shall notify the permittee in writing when the Director either considers modifying or revoking the permit and allow the permittee to respond:

(A) The Director may modify the ASR permit for any of the following reasons:

(i) to reflect changes in HD and DEQ water quality or treatment standards;

(ii) to address needed technological changes as requested by DEQ or HD to minimize constituents regulated under OAR 333-61-030 (ORS 448.131 and .273) or OAR 340-40 (ORS 468B.165);

(iii) upon written request from the permittee for minor adjustments to the authorization in the permit;

(iv) upon written request from the permittee for changes in the limits for the recovery of stored water. Any person operating an ASR project under a permit, upon approval by the Director, may recover up to 100 percent of the water stored in the aquifer storage facility if valid scientific data gathered during operations under the limited license or permit demonstrate that the injected source water is not lost through migration or other means and that groundwater otherwise present in the aquifer has not been irretrievably lost as a result of aquifer storage or recovery.

(B) The Director may revoke or modify the ASR permit for any of the following reasons:

(i) to prevent or mitigate substantial interference with other water rights, minimum perennial streamflows established prior to the granting of the ASR permit, or aquifer water quality; or

(ii) to address any other unintended, injurious effects of the ASR activity.

(C) The Department shall offer an additional public comment opportunity consistent with the notice and comment provisions of OAR 690-350-030 prior to modifying or revoking the permit.

(d) Compliance with Other Laws. The injection of acceptable water into an aquifer(s) under an ASR permit shall comply with all applicable local, state or federal laws;

(e) Water Quality Conditions:

(A) The ASR permit shall include conditions to minimize, to the extent technically feasible, practical and cost-effective, the concentration of constituents in the injection source water that are not naturally present in the aquifer;

(B) Except as otherwise provided in (6)(e)(C) of this rule, if the injection source water contains constituents regulated under OAR 333-61-030 (ORS 448.131 and .273) or OAR 340-40 (ORS 468B.165) that are detected at greater than 50 percent of the established levels, the aquifer storage and recovery permit may require the permittee to employ technically feasible, practical and cost-effective methods to minimize concentrations of such constituents in the injection source water. The Department, in consultation with DEQ and HD, may set specific limits between 50 and 100% of the established level for constituents

regulated under OAR 333-61-030 (ORS 448.131 and .273) or OAR 340-40 (ORS 468B.165) as provided by the standards in (4)(b)(D) of this rule;

(C) Constituents that have a secondary contaminant level or constituents that are associated with disinfection of the water may be injected into the aquifer up to the standards established under OAR 333-61-030 (ORS 448.131 and .273);

(D) The Department may, based upon valid scientific data, further limit certain constituents in the injection source water if the Department finds that those constituents will interfere with or pose a threat to the maintenance of the water resources of the state for present or future beneficial uses;

(E) The permittee shall be in compliance with treatment requirements and performance standards for source waters that fall in categories identified in OAR 333-61-032;

(F) If during the course of ASR operations a constituent which is regulated under OAR 333-61-030 (ORS 448.131 and .273) or OAR 340-40 (ORS 468B.165) is detected above the level prescribed in the permit, the permittee shall stop injection activities and notify the Department.

(f) Monitoring/Sampling/Recovery/Reporting:

(A) The permit shall include requirements for reporting, sampling and monitoring the ASR project aquifer impacts and for constituents reasonably expected to be found in the injection source water;

(B) The permit shall specify limits for the recovery of stored water up to 100 percent.

(g) Protection for Existing Users. The ASR permit shall be conditioned to protect existing water rights and the water quality of existing users that rely upon the receiving aquifer and the injection source water;

(h) Other Conditions. The permit may contain any other conditions required by the Director to protect the public welfare, health, and safety.

Stat. Auth.: ORS 536.027 and 537.534
Stats. Implemented: ORS 537.531 - 537.534

Artificial Groundwater Recharge

Definitions

690-350-110 The following definitions apply to artificial groundwater recharge in OAR Chapter 690, Division 350, Rules 110 to 130:

(1) "Artificial Groundwater Recharge" means the intentional addition of water diverted from another source to a groundwater reservoir. (Applications to obtain permits for artificial groundwater recharge uses submitted pursuant to OAR 690-350-110 to 690-350-130 are not subject to provisions governing aquifer storage and recovery projects or programs pursuant to OAR 690-350-010 to 690-350-030.)

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

(3) "Department" means the Water Resources Department.

(4) "Director" means the Director of the Department.

(5) "Groundwater Reservoir" means a designated body of standing or

moving groundwater as defined in ORS 537.515(5).

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

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

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

(9) "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.

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

Stat. Auth.: ORS 536.025, 536.027, 536.220, 536.300, 536.310, 537.338, 537.356 - 537.358, Ch. 540 & 543
Stats. Implemented: ORS 537.135

Groundwater Recharge Applications — Supplemental Information Requirements; Permit Conditions

690-350-120 (1) Permit Required. The appropriation of water from any source for the purpose of recharging a groundwater reservoir requires a permit. Likewise, any beneficial use of artificially recharged groundwater in any such groundwater reservoir requires a secondary groundwater permit.

(2) Pre-application Conference. Due to the complexities and costs associated with recharge projects and recharge permitting, the Department requires a pre-application conference.

(3) Supplemental Information for Permit Application. In addition to data required on permit applications under OAR 690-310-040, the applicant shall submit additional information to assist the Commission in determining the public interest on the proposed project. An application shall be accepted by the Department for filing only if it contains all required data. Upon request, the Department may assist other agencies in developing their responses to permit applications. The following attachments are necessary:

(a) Minimum Perennial Stream Flow or Instream Water Right. If a stream is the proposed recharge source, the applicant shall provide a copy of the document which establishes that the supplying steam has a minimum perennial stream flow or instream water right for the protection of aquatic and fish life. If none is established, the applicant shall attach a copy of a waiver of this prerequisite from the Oregon Department of Fish and Wildlife;

(b) Water Quality Permit. The applicant shall attach a copy of the necessary water quality permits from Oregon Department of Environmental Quality, show that the application for necessary permits has been filed, or show

that permits are not necessary;

(c) Purpose of Recharge. The applicant shall describe the ultimate use or value of the groundwater recharge;

(d) Annual Storage. The applicant shall describe the volume of water, or the range of volumes, expected to be stored annually by artificial recharge. The applicant shall describe anticipated losses between the point of diversion and the place of recharge;

(e) Financial Capability. If the proposed recharge diversion is for five cfs or more, the applicant shall display proof of financial capability to construct and operate the proposed project. Unless otherwise approved by the Director, the capability shall be supported by written statements from a lending institution;

(f) Hydrogeologic Feasibility Report. The applicant shall demonstrate that the proposed recharge project is hydrologically feasible. The report should include an assessment of groundwater conditions in the reservoir and anticipated changes due to the proposed recharge project. This report shall be sealed and signed by a professional(s) registered or allowed, under Oregon law, to practice in this area of geology;

(g) Project Description Report. The applicant shall provide plans for recharge project construction, operation, and costs. The report shall outline proposed monitoring plans for flows, water levels in wells and groundwater quality. If surface water is a proposed source of recharge, the report shall indicate when surplus surface waters are generally available. The report shall be sealed and signed by a professional(s) registered or allowed, under Oregon law, to practice civil engineering and this area of geology;

(h) Additional Information. The Director may require the applicant to submit additional information to assist in making the public interest determination.

(4) Recharge Permit Processing. The Director shall work with the applicant and may work with any person or agency to prepare a draft permit. In particular, the Director shall seek assistance from the State Department of Environmental Quality to develop a water quality monitoring program and standards.

(5) Permit Conditions. Any permit shall address the following items:

(a) Maximum rate and volume. A permit shall specify a maximum diversion rate and a maximum annual diversion volume;

(b) Meters. The recharge permit shall require both the metering of recharge water from the source(s) and metering of water at the place(s) of recharge. Any subsequent secondary groundwater permit shall require metering of stored recharge water withdrawals;

(c) Records, Inspections. The permit shall require the permittee to keep accurate and current records of metered values, water levels and other pertinent information. The permit shall allow the Director to inspect records or works covered by the permit upon reasonable notice and at any reasonable time;

(d) Estimated Data. When metered or measured data are missing in whole or in part, the Director may make estimates from available data. The Director's estimates shall be reasonable and, where there is a range of

uncertainty, be conservatively low on water delivered to the place of recharge and conservatively high on withdrawals of stored recharge water;

(e) Water Levels. The response of water levels in wells shall provide the principal basis on which to judge the effectiveness of recharge under the permit and the availability of stored recharge water:

(A) Monitoring Program. The permit shall specify a water level monitoring program for selected times and wells; and

(B) Key Wells, Target Levels. The permit shall designate several key wells in the monitoring program. The permit shall establish upper and lower target water levels for each well. Actual water levels on an annual assessment date shall be compared to the target levels for the purpose of prescribing allowable use of stored recharge water.

(f) Determination of Stored Recharge Water. The permit shall specify the formula to determine the availability of artificially recharged groundwater for appropriation. The formula shall result from one of the following:

(A) Negotiation. The applicant and the Department may negotiate a formula which relies principally on water levels in wells, metered quantities of recharge, secondary permit withdrawals, and hydrogeologic conditions in the area. At permit issuance, stored recharge water may be credited at up to 85 percent of water metered to the place of recharge. Withdrawals of stored recharge water shall be debited at 100 percent of metered values. Calculations of stored recharge water shall be based only on recharge over the last five years;

(B) Definitive Groundwater Investigation. The applicant may present a definitive groundwater investigation as a method to determine stored recharge water. The Director must be satisfied that use of such information accurately describes the quantity and location of water available for withdrawal as a result of the recharge. That quantity must be in excess of the groundwater which would be available if artificial recharge were not practiced. If no agreement is reached by negotiation, the applicant must determine stored recharge water by a definitive groundwater investigation.

(g) Storage Account. The Department shall record its final determinations on stored recharge water in a storage account. The permit shall specify a method by which the permittee may obtain information on that account;

(h) Annual Report. The permittee shall submit an annual report to both the Department and any secondary permittee. That report shall include the range of recharge rates and total quantities during the year at both the diversion point and the place of recharge. In addition, the report shall include a general operations review, the permittee's estimate of the storage account and the results of other water quantity and quality programs which are required in the permit;

(i) Allowable Use of Stored Recharge Water. See rules governing secondary groundwater permits in OAR 690-350-130;

(j) Permit Assignment. A permit condition shall require a potential assignee to prove, to the Director's satisfaction, the financial capability to construct uncompleted portions of and operate the project, if such proof was required for the application;

(k) Condition Changes. If, under actual operation of the recharge project, the Director notifies the permittee that the Director has reason to believe there are adverse groundwater quantity or quality effects, the permittee shall cease recharge activities. No further diversion shall be made until measures to prevent, correct or monitor those adverse effects have been agreed to and implemented;

(l) Technical Oversight. If the recharge diversion is for five cfs or more, the permit may require the permittee to have the construction and operation of the proposed project overseen by a professional(s) registered or allowed, under Oregon law, to practice civil engineering;

(m) Other Conditions. The permit may contain other conditions which the Commission believes are necessary.

(6) Recharge Certificate. Annual reports as required in the permit shall be an element of proof of appropriation to the satisfaction of the Department prior to issuance of a confirming water right certificate. Operational conditions of the permit shall become conditions of the certificate.

Stat. Auth.: ORS 536.025, 536.027, 536.220, 536.300, 536.310, ORS 537.135, 537.338, 537.356 - 537.358, Ch. 540 & 543
Stats. Implemented: ORS 537.135

Secondary Groundwater Permits for Use of Artificially Recharged Waters; Supplemental Information Requirements; Limitations; Conditions

690-350-130 (1) Permit Required. The appropriation of artificially recharged groundwater for any beneficial use requires a secondary groundwater permit.

(2) Supplemental Information for Permit Application. In addition to data required for permit applications under OAR 690-310-040, the applicant shall submit certain additional information. The following attachments are necessary:

(a) Identify Source. The applicant shall identify an artificially recharged groundwater reservoir as a supply of water;

(b) Written Consent. The applicant shall include the written consent of the holder of the recharge permit or certificate;

(c) Source Proof. The applicant shall submit proof that the proposed use will actually be from the recharged reservoir. Documentation may include water level similarities to the recharged reservoir, geologic and geographic similarities, hydraulic information, and other pertinent data; and

(d) Recharge Understanding. The applicant shall attach a copy of the currently valid recharge certificate or permit and a statement that the applicant understands its content and the conditions of that recharge.

(3) Limitations on Secondary Groundwater Permit Approval. During the first five years of recharge, the Department shall limit cumulative secondary permits to no more than 85 percent of the project's permitted annual recharge volume. Subsequent recharge permits may exceed 85 percent based on recharge performance as determined by the Department.

(4) Secondary Groundwater Permit Conditions. A secondary groundwater permit shall address the following items:

(a) Maximum Rate and Volume. A permit shall specify a maximum diversion rate and annual diversion volume;

(b) Meters. The permit shall require the permittee to meter all withdrawals so as to provide data as a debit against the storage account;

(c) Water Levels. The permit shall require the permittee to measure water levels on a specified basis;

(d) Estimated Data. The permit shall specify that when metered or measured data are missing in whole or in part, the Director may make estimates from available data. The Director's estimates shall be reasonable and, where a range of uncertainty exists, be conservatively high on withdrawal of stored water;

(e) Records, Inspections. The permit shall require the permittee to keep accurate and current records of withdrawals and water levels. The Director may inspect any records or works covered by the permit upon reasonable notice and at any reasonable time;

(f) Annual Report. The permittee shall be required to submit an annual report to the Director and holder of the recharge right. The report shall note withdrawals, dated water levels and other data pertinent to the storage account;

(g) Allowable Use of Stored Recharge Water. The permit shall indicate that availability shall be determined on the basis of secondary groundwater right priority and the allowable use of stored recharge water. The allowable use of stored recharge water falls into three categories. For ease of reference, these categories are named as the following color zones:

(A) Green Zone. If water levels at key wells are above the upper target level, use is allowed up to the maximum of the storage account or maximum duty, whichever is lower. These wells and targets are noted in the recharge permit;

(B) Yellow Zone. If water levels at key wells are between the upper and lower target levels, use is allowed up to 85 percent of the recharge volume for the preceding 12 months; and

(C) Red Zone. If water levels at key wells are below the lower target level, no use of stored recharge water is allowed.

(h) Condition Changes. If the Director has reason to believe that the well(s) is not withdrawing artificially recharged groundwater or there are other substantial groundwater concerns, the permittee shall cease withdrawal upon notice from the Director. No further withdrawal shall be made until measures to prevent, correct or monitor the situation have been agreed to and implemented; and

(i) Other Conditions. The permit may contain other conditions which the Director specifies.

(5) Secondary Groundwater Certificate. Annual reports as required in the permit shall be an element of proof of appropriation to the satisfaction of the Department prior to issuance of a confirming water right certificate. Operational conditions of the permit shall become conditions of the certificate.

Stat. Auth.: ORS 536.025, 536.027, 536.220, 536.300, 536.310, 537.135, 537.338, 537.356 - 537.358, Ch. 540 & 543
Stats. Implemented: ORS 537.135