

## Artificial Groundwater Recharge Application Guidelines

Artificial Groundwater Recharge (AR) applications require extensive attachments. Consult OAR 690-350-110 to -130 for a complete description. AR projects in Oregon usually start by testing under a limited water use license for AR testing. If the licensee wants to recover the stored water and put it to a beneficial use, a second limited license for AR recovery testing is obtained. After testing under a limited license, a licensee can then apply for a permit for artificial groundwater recharge paired with a secondary groundwater permit to recover and use that stored water. These permits are eventually certificated like other water rights in Oregon. The following list summarizes the major components required to file complete AR Testing and AR Recovery Testing Limited License Applications.

1. Schedule a pre-application conference with Department staff

### <u>Artificial Groundwater Recharge Testing Application</u>

- Limited License Application Form and map per OAR 690-340, available at: http://www.oregon.gov/owrd/Forms/pages/default.aspx
- 3. Minimum Perennial Stream Flow or Instream Water Right if AR source water is from a stream
  - o Copy of the document or
  - o A waiver of this prerequisite from the Oregon Department of Fish and Wildlife or
  - Comments from ODFW that specify conditions under which diversion is allowable (these are often provided directly from ODFW to OWRD)
- 4. AR Project Description Report, developed and signed by Registered Geologist (RG) and by Professional Engineer (PE)
  - Plans for project construction
  - Operational plans, such as injection rates and schedules
  - Water storage volumes and durations
  - Recovery rates and schedule
  - Water quality monitoring plan
  - Water level monitoring plan, including location of observation wells, to determine when, where and how much stored water can be recovered
  - Water quantity measurement plan

# 5. Hydrogeologic Feasibility Report, developed and signed by RG with expertise in hydrogeology

- Local geology and conceptual hydrogeologic model
- Description of aquifer targeted for storage
- Assessment of current conditions in the target aquifer
- Anticipated changes to groundwater system due to proposed AR testing
- Description of how these factors affect AR feasibility, including recoverability of stored water

### 6. Water Quality

- Demonstrate source water meets anti-degradation standards per ODEQ, with water quality data from source water and groundwater
- Oregon Department of Environmental Quality (DEQ) per 340-040
  - Contact Eastern Oregon: Phil Richerson , <a href="mailto:Phil.Richerson@state.or.us">Phil.Richerson@state.or.us</a>
  - Contact Western Oregon: Seth Sadofsky , <u>Seth.Sadofsky@state.or.us</u>

#### **AR Recovery Testing Application**

- 1. Limited License Application Form and map per OAR 690-340
  - o Identify recovery wells, places of use, type and season of use
- 2. Identify artificially recharged groundwater reservoir that wells will access
- 3. Provide evidence that the proposed use will actually be from the recharged aquifer, which may include:
  - o Groundwater level data
  - Geologic and geographic similarities
  - Hydraulic information

OWRD AR Contact: Jen Woody 503-986-0855, Jennifer.L.Woody@oregon.gov