



Oregon

Tina Kotek, Governor

Oregon Water Resources Department

725 Summer St NE, Suite A

Salem, OR 97301

MEMORANDUM

PREPARED FOR: LL for AR Recovery Testing LL-2021 file

PREPARED BY: Andrew Wentworth, Hydrogeologist

SUBJECT: GSI Technical Memorandum “Artificial Recharge Recovery Limited License Application Supplemental Information – Madison Ranches, dated September 15, 2025, received 1/15/2026

DATE: 4/6/2026



Background

The referenced report provides the supplemental application materials required for Secondary Groundwater Permits for use of artificially recharged water. Groundwater level data continue to demonstrate that artificially recharged water is available to the project’s recovery well (the windmill collector well/UMAT 57869) in the short term. Water levels quickly return to pre-recharge levels when recharge ceases, indicating water does not remain nearby for year-to-year carryover in a storage account.

LL-2021 for AR Recovery Testing

Application LL-2021, in combination with earlier project documents (see GSI, July 17, 2009, Technical Memorandum regarding Hydrogeologic Feasibility Assessment and Project Description Report for Artificial Recharge Limited License Application – Madison Farms) meets OAR 690-350-0120 requirements for recovery testing of water artificially recharged under LL-1997.

Please note: Figure 3 depicts groundwater level data (at UMAT 56964 and 56963) that are collected, processed, published and made publicly available by OWRD. These data should be cited as such in the caption and in the reference section.

The application meets minimum requirements for issuing an LL for AR recovery testing for the 2026 irrigation season. Recommended AR related conditions are noted below.

OWRD completeness comments for LL-2021:

OAR 690-350-0120(3)(c) Purpose of recharge. The stated purpose is to recover water under LL-2021 for supplemental irrigation and stock water. Limited licenses for AR recovery for the beneficial use of irrigation can only be issued for one year.

OAR 690-350-0120(3)(d) Annual storage: No annual storage volume requested. The project is authorized to divert 25 cfs from Butter Creek under AR LL-1997.

OAR 690-350-0120(3)(f) Hydrogeologic Feasibility Report. The project recharges greater volumes than it recovers, with no residual head change. These water level data indicate the water infiltrated by AR does not remain within the influence of the collector well year-over-year. Therefore, LL-2021 will be conditioned to allow recovery of 85% of the volume recharged in a given irrigation season, with no carry-over into future years.

OAR 690-350-0120(3)(g) Project Description Report.

1. The collector well “Windmill Well” (UMAT 57869) is used to recover water stored by artificial groundwater recharge is also authorized for use of a regular groundwater right.
2. Totalizing flowmeters will be required at the recovery well.
3. The monitoring plan for LL-1997 is already approved for the purpose of testing. If the project advances to a permit, key wells and target water levels—as defined in OAR 690-350-0120 (5)(e)—must be defined determine the recoverable percentage of water. Testing during the LL phase should be designed to define these aspects of a more permanent authorization. OWRD monitors water levels at wells associated with this project as resources allow, as part of our regional groundwater level monitoring program. The Department cannot guarantee we will have the resources to continue indefinitely. We recommend the project operator or agent check in with Andrew Wentworth, OWRD Hydrogeologist, once per year to assess data collection plans.

AR-related Conditions to be included in LL-2021, if it is issued:

1. Before water use may begin under this license, the licensee shall install a totalizing flowmeter to record recovered volume at each recovery well. The totalizing flowmeters must be installed and maintained in good working order. In addition, the licensee shall maintain a record of all water use, including the total number of hours of diversion, the total volume diverted, and the categories of beneficial use to which the water is applied. During the period of the limited license, the record of use shall be available for review by the Department upon request, and shall be submitted to the Watermaster upon request.
2. The licensee shall adhere to the current, approved test and monitoring plan. A revised, superseding plan may be submitted to the Department at any time. The Department may approve, condition, or reject such plans.
3. The licensee shall submit annual reports to the Department by April 15 each year. This report will detail recharge testing and any subsequent recovery under a secondary limited license from the preceding water year. Reporting shall include, but is not limited to, the results of testing efforts that relate to water quality, water quantity, and operations. Water level data shall be submitted in a Department-specified digital format. The licensee shall consult with ODEQ and OWRD to identify additional specific reporting elements. The licensee shall consult with ODEQ and OWRD to identify additional specific reporting elements. The report is due in April 2027. Annual reports shall be sealed and signed by a professional(s) registered or allowed, under Oregon law, to practice geology. Failure to provide the written report could affect the Department’s ability to issue future limited licenses for this use.