

# Groundwater Transfer Review Summary Form

Transfer/PA # T- 14522 (RA)

GW Reviewer Travis Brown Date Review Completed: 10/11/2024

## Summary of Same Source Review:

The proposed change in point of appropriation is not within the same aquifer as per OAR 690-380-2110(2).

## Summary of Injury Review:

The proposed transfer will result in another, existing water right not receiving previously available water to which it is legally entitled or result in significant interference with a surface water source as per 690-380-0100(3).

## Summary of GW-SW Transfer Similarity Review:

The proposed SW-GW transfer doesn't meet the definition of "similarly" as per OAR 690-380-2130.

*This is only a summary. Documentation is attached and should be read thoroughly to understand the basis for determinations.*



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## Ground Water Review Form:

- Water Right Transfer**
- Permit Amendment**
- GR Modification**
- Other**

Application: T-14522

Applicant Name: ED Landholdings, LLC

Proposed Changes:     POA             APOA             SW→GW             RA  
                                   USE             POU             OTHER

Reviewer(s): Travis Brown

Date of Review: 10/11/2024

Date Returned to WRSD: 10/11/2024

The information provided in the application is insufficient to evaluate whether the proposed transfer may be approved because:

- The water well reports provided with the application do not correspond to the water rights affected by the transfer.
- The application does not include water well reports or a description of the well construction details sufficient to establish the ground water body developed or proposed to be developed.
- Other \_\_\_\_\_

- 
1. Basic description of the changes proposed in this transfer: Applicant proposes to add 1 APOA – “Well 2” (not constructed) – to Certificate 34795, which currently authorizes Irrigation of 76.2 acres at a maximum rate of 0.95 cfs from 1 POA – “Well 1” (MARI 4776).
  2. Will the proposed POA develop the same aquifer (source) as the existing authorized POA?  
 Yes     No    Comments: Both the authorized and proposed POA produce groundwater from the Willamette alluvial aquifer system (Conlon et al., 2005).
  3. a) Is there more than one source developed under the right (e.g., basalt and alluvium)?  
 Yes     No    Comments: The sole authorized POA produces groundwater from the Willamette alluvial aquifer system (Conlon et al., 2005).  
 b) If yes, estimate the portion of the right supplied by each of the sources and describe any limitations that will need to be placed on the proposed change (rate, duty, etc.): N/A
  4. a) Will this proposed change, at its maximum allowed rate of use, likely result in an increase in interference with **another ground water right**?  
 Yes     No    Comments: Proposed APOA is ~1,040 ft southeast of MARI 4778 – sole authorized POA for Certificates 40100 and 50095 – and ~1,320 ft north of MARI 4781 – sole authorized POA for Certificate 47528 and Permit G-13582. The authorized POA Well 1 (MARI 4776) is ~1,860 ft northeast of MARI 4778 and ~2,970 ft northeast of MARI 4781. The shorter intervening distances would likely increase interference between the proposed APOA and these neighboring wells.

b) If yes, would this proposed change, at its maximum allowed rate of use, likely result in another groundwater right not receiving the water to which it is legally entitled?

Yes  No If yes, explain: Interference between the proposed APOA and neighboring wells was analyzed using the Theis (1935) solution for drawdown in a confined aquifer (see Well-to-Well Interference Analysis, attached). Results of the analysis indicate that injury of the rights associated with MARI 4778 and 4781 is unlikely as a result of the proposed change.

5. a) Will this proposed change, at its maximum allowed rate of use, likely result in an increase in interference with **another surface water source**?

Yes  No Comments: The proposed APOA is not appreciably closer to nearby surface water sources. No increase in surface water interference is anticipated.

b) If yes, at its maximum allowed rate of use, what is the expected change in degree of interference with any **surface water sources** resulting from the proposed change?

Stream: \_\_\_\_\_  Minimal  Significant

Provide context for minimal/significant impact: \_\_\_\_\_

6. For SW-GW transfers, will the proposed change in point of diversion affect the surface water source similarly (as per OAR 690-380-2130) to the authorized point of diversion specified in the water use subject to transfer?

Yes  No Comments: \_\_\_\_\_

7. What conditions or other changes in the application are necessary to address any potential issues identified above: \_\_\_\_\_

8. Any additional comments: \_\_\_\_\_

## References

Application File: T-14522

Permit: G-13582 | Certificate: 34795, 40100, 47528, 50095

Pumping Tests reports: MARI 2769, 3814, 3833, 3846, 3852, 4792, 18338, 18339

Conlon, T.D., Wozniak, K.C., Woodcock, D., Herrera, N.B., Fisher, B.J., Morgan, D.S., Lee, K.K., and Hinkle, S.R., 2005, Ground-water hydrology of the Willamette Basin, Oregon, Scientific Investigations Report 2005-5168: U. S. Geological Survey, Reston, VA.

Gannett, M.W. and Caldwell, R., 1998, Geologic framework of the Willamette Lowland aquifer system, Oregon and Washington, Professional Paper 1424-A, 32 p: U. S. Geological Survey, Reston, VA.

Theis, C.V., 1935, The relation between the lowering of the piezometric surface and the rate and duration of discharge of a well using groundwater storage, American Geophysical Union Transactions, vol. 16, p. 519-524.

Woodward, D.G., Gannett, M.W., and Vaccaro, J.J., 1998, Hydrogeologic framework of the Willamette Lowland aquifer system, Oregon and Washington: U.S. Geological Survey Professional Paper 1424-B, 82 p.

Well Location Map

T-14522

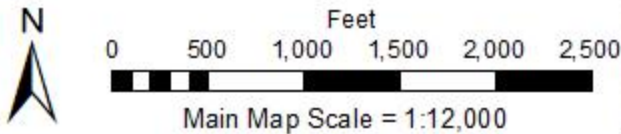


**Legend**

- Authorized POA
- Proposed APOA

**Wells by Aquifer System**

- Quaternary-Late Tertiary Sediment Aquifers
- Unknown



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**Well-to-Well Interference Analysis**

Parameters:

Pumping rate, Q = 0.95 cfs [maximum rate for APOA]

Pumping duration, t<sub>pump</sub> = 101 days [approximate time to exhaust full duty of Cert 34795 at maximum rate]

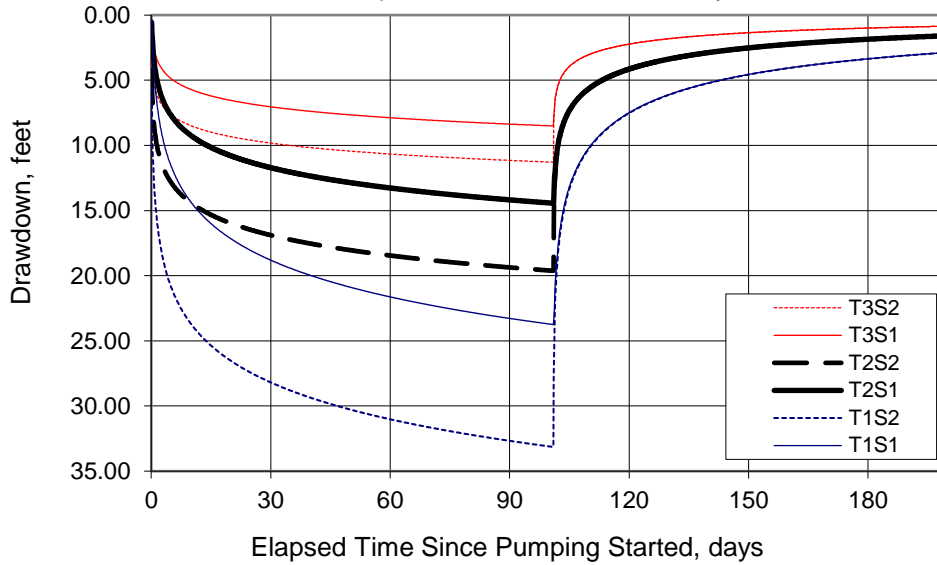
Transmissivity, T1 = 1,600 ft<sup>2</sup>/day; T2 = 2,900 ft<sup>2</sup>/day; T3 = 5,400 ft<sup>2</sup>/day [Pumping test reports]

Storativity, S1 = 0.001; S2 = 0.0001 [Conlon et al., 2005, MSU]

**APOA to MARI 4778**

Thisis Drawdown and Recovery at r = 1040 ft From Pumping Well

Pump on = 145440 minutes = 101.00 days



**APOA to MARI 4781**

Thisis Drawdown and Recovery at r = 1320 ft From Pumping Well

Pump on = 145440 minutes = 101.00 days

