

Groundwater Transfer Review Summary Form

Transfer/PA # T- 14697

GW Reviewer Byron Ebner and Grayson Fish Date Review Completed: 8/12/2025

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 Water Level Decline Condition Review:

☐ Water levels at the original point(s) of appropriation have exceeded the allowed decline threshold defined by conditions in the originating water right.

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-14697

Applicant Name: Jason Cole & Elizabeth Cleary Cole

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

Reviewer(s): Byron Ebner and Grayson Fish

Date of Review: 8/12/25

Date Reviewed by Basin Hydrogeologist and Returned to WRSD: 8/18/2025

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: Add APOA for Certificate 98329. Will be used as their main well since it has more efficient power available for pump.

a. Authorized POAs

b) JOSE 59341

c) JOSE 60213

d) JOSE 60294

b. Proposed APOA

b) JOSE 61281

Period of Use: 4/1 – 10/31, Max rate: 0.13 CFS for 15 acres

2. Will the proposed POA develop the same aquifer (source) as the existing authorized POA?
☒ Yes ☐ No Comments: Broken Formation: JTvs-Volcanogenic sedimentary rocks, JTs- Siliciclastic sedimentary rocks, or JTv- are all possible formations encountered in the authorized and proposed POAs. These are all part of the Broken Formation per a geologic map by T.J. Wiley, 2006. Per D.L. Peck (1961), these rocks are the metasedimentary and metavolcanic rocks of the Applegate Group.

All authorized and proposed wells seem to be cased into fractured rock aquifer underlying the alluvium. Wells are generally sealed into clay alluvium or fractured rock and cased into fractured bedrock WBZ.

Lissner (1979), divides the aquifer units into three groups

- Holocene Alluvium: Specific capacities of 1-10 gpm/ 1 ft of drawdown
- Intrusive Granites: Specific capacities of 1 gpm / 14 ft of drawdown to 3 gpm / 1 ft of drawdown.
- All other geologic units of the Applegate Basin: Specific Capacities of 1 gpm / 30 ft of drawdown to 0.7 gpm / 1 ft of drawdown.

Specific capacity of Authorized POA (JOSE 60294) is 10 gpm / 62.6 ft of drawdown.

3. a) Is the existing authorized POA subject to a water level decline condition?
☐ Yes ☒ No Comments: _____
- b) If yes, for each POA identify the reference level, most recent spring-high water level, and whether an applicable permit decline condition has been exceeded: _____
4. a) Is there more than one source developed under the right (e.g., basalt and alluvium)?
☐ Yes ☒ No Comments: _____
- 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.): _____
5. 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: Closest well to proposed POA is JOSE 10480 (G-17864), which is 2100 ft away. Authorized POAs are 2250 – 2470 ft away from JOSE 10480. Based on distance to the nearest POA, this proposed change has the potential to increase interference with wells to the south and east.
- 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: The occurrence and magnitude of interference with nearby wells can be difficult to predict in fractured bedrock aquifers. While interference may increase due to shifting use to the proposed APOA, the relatively small reduction in distance to nearby POAs coupled with fact that permitted rate and duty will not change suggests that JOSE 10480 will likely continue to receive the water that it is legally entitled to.
6. 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: Proposed APOA is moving use 140 ft closer to Horsehead creek (4650 ft away), 150 ft closer to Williams Creek (6340 ft away), and 190 ft closer to Webb Reservoir (5730 ft away). Proposed APOA is moving further away from Powell Creek.

Considering the inverse relationship of streamflow depletion and distance from well to stream (Barlow and Leake, 2012), there may be increased interference with Horsehead Creek, Williams Creek, and Webb Reservoir.

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: Horsehead Creek ☒ Minimal ☐ Significant

Stream: Williams Creek ☒ Minimal ☐ Significant

Provide context for minimal/significant impact: The relatively small change in distance to the affected streams compared to the authorized POAs is expected to result in a minimal increase in interference with the identified surface water sources.

7. 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: _____
8. What conditions or other changes in the application are necessary to address any potential issues identified above: _____
9. Any additional comments: In addition to the four POAS (3 authorized and 1 proposed), there is JOSE 60274 near the POU for this certificate in the SE corner of the property. JOSE 60274 is a domestic well that was drilled in 2017 and completed in similar formations to the other POAs.

References:

- Barlow, P. M., & Leake, S. A. (2012). Streamflow depletion by wells—Understanding and managing the effects of groundwater pumping on streamflow. In Streamflow depletion by wells—Understanding and managing the effects of groundwater pumping on streamflow (C1; USGS Numbered Series No. 1376; Circular, Vol. 1376, p. 95). U.S. Geological Survey; GW Library. <https://doi.org/10.3133/cir1376>
- Lissner, F. G. (1979). Ground Water Conditions in the Applegate Basin. Oregon Water Resources Department.
- Peck, D.L. and Wells, F.G. (1961). Geologic Map of Oregon West of the 121st Meridian. Miscellaneous Geologic Investigations Map I-325. U.S. Geological Survey.
- Wiley, T.J. (2006). Preliminary geologic map of the Sexton Mountain, Murphy, Applegate, and Mount Isabelle 7.5' quadrangles, Jackson and Josephine Counties, Oregon. Open File Report O-06-11. Oregon Department of Geology and Mineral Resources.
- Application T-14697 File
- Well log for JOSE 10480

Application T-14697 (T38S-R05W, Section 15)

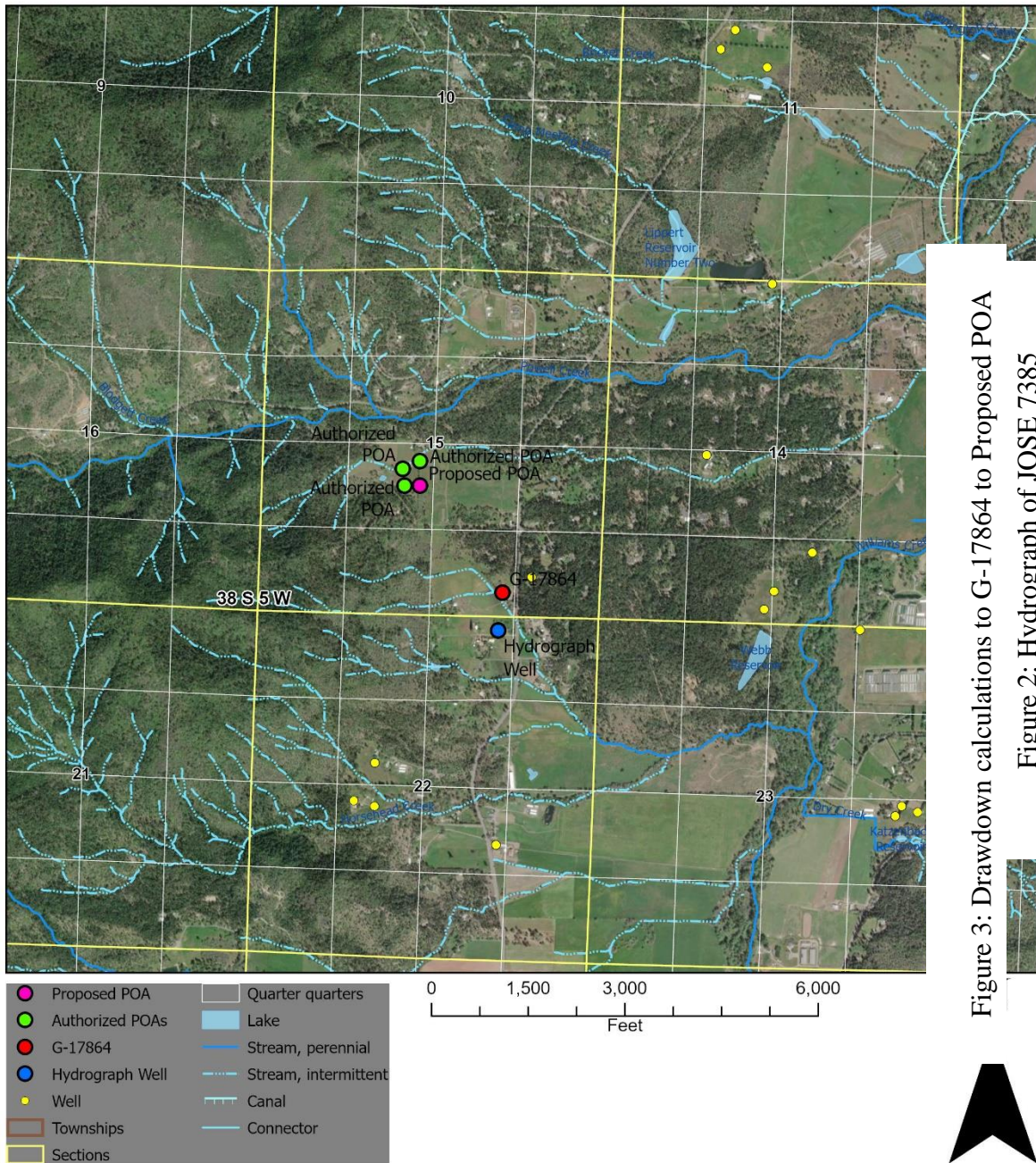


Figure 3: Drawdown calculations to G-17864 to Proposed POA

Figure 2: Hydrograph of JOSE 7385

Figure 1: Map of T-14697