Groundwater Transfer Review Summary Form

Transfer/PA # T- _14650_

GW Reviewer _Mitra Khadka_ Date Review Completed: _9/12/2025_

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.

Ground Water Review Form:

Oregon Water Resources Department
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Salem, Oregon 97301-1271
(503) 986-0900
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☐ **Water Right Transfer**
☒ **Permit Amendment**
☐ **GR Modification**
☐ **Other**

Application: T-14650 Applicant Name: City of Independence

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

Reviewer(s): Mitra Khadka Date of Review: 9/12/2025

Date Returned to WRSD: 9/12/2025

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 _____

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1. Basic description of the changes proposed in this transfer: The applicant proposes to add four additional wells (APOAs), **POLK 52307, POLK 51438, POLK 2945** and **POLK 54296**, to **Permit: G-17750** (Priority Date: February 4, 2016). Permit: G-17750 currently authorizes well **POLK 53003** to withdraw groundwater at a maximum rate of 0.56 cfs for municipal uses. Of the proposed APOAs, wells POLK 52307 and POLK 2945 are presently authorized POA under Permit: G 2279 and wells POLK 52307 and POLK 54296 are authorized POA under Permit: G-12134.

   The applicant further proposes expansion of the authorized place of use (POU) to include the entirety of the City's service area.

2. Will the proposed POA develop the same aquifer (source) as the existing authorized POA?
   ☒ Yes ☐ No Comments: The authorized well (POLK 53003) is completed to a depth of 45 feet below land surface (bls) and produces groundwater from the Quaternary-Late Tertiary sedimentary aquifer designated as the Willamette Aquifer. This aquifer is composed of unconsolidated floodplain sand and gravel deposits (Gannet and Caldwell, 1998; Conlon et al., 2005). Locally, the aquifer is highly permeable, ~20-40 ft thick, and is overlain by ~20 ft of fine-grained, low-permeability Willamette Silt Unit (Gannett and Caldwell, 1998). The proposed APOAs are completed at depths of 50 to 64 feet bls and will also produce from the same Willamette Aquifer as the authorized POA.

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: The reference water level for the authorized point of appropriation (POLK 53003) was established at 13.6 feet below land surface (bls), based on a measurement taken on March 13, 2018. The most recent recorded spring high water level was 16.0 feet bls, measured on March 3, 2020, and does not appear to exceed the permit's decline condition. However, the permittee is not in compliance with the Static Water Level Permit Condition, which requires submission of annual static water level measurements for each well authorized under the permit. No static water level data has been reported since 2020.

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: **Claim: GR 422** (Priority Date: 6/1/1952) is the nearest another groundwater right, located ~900 ft north of the proposed APOA (POLK 2945). POLK 2944 appears to be an authorized POA under **Claim: GR 422.** POLK 2944 is ~2,300 ft north-east of the authorized POA, POLK 53003. A decrease in intervening distance will likely result in an increase in interference with the neighboring well POLK 2944.

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: Potential interference with POLK 2944 from the proposed changes were evaluated using the Theis (1935) solution for drawdown in a confined aquifer (see attached Well Interference Analyses). The results indicate that the proposed changes are unlikely to injure neighboring groundwater rights.

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: The nearest surface water source to both the authorized POA and the proposed APOAs is Willamette River. The proposed APOAs are located at distances that are either greater than, or similar to, the distance of the authorized POA from the river. Therefore, the proposed APOAs will not likely increase the potential for hydraulic interference with the river.

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: _____

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:_____

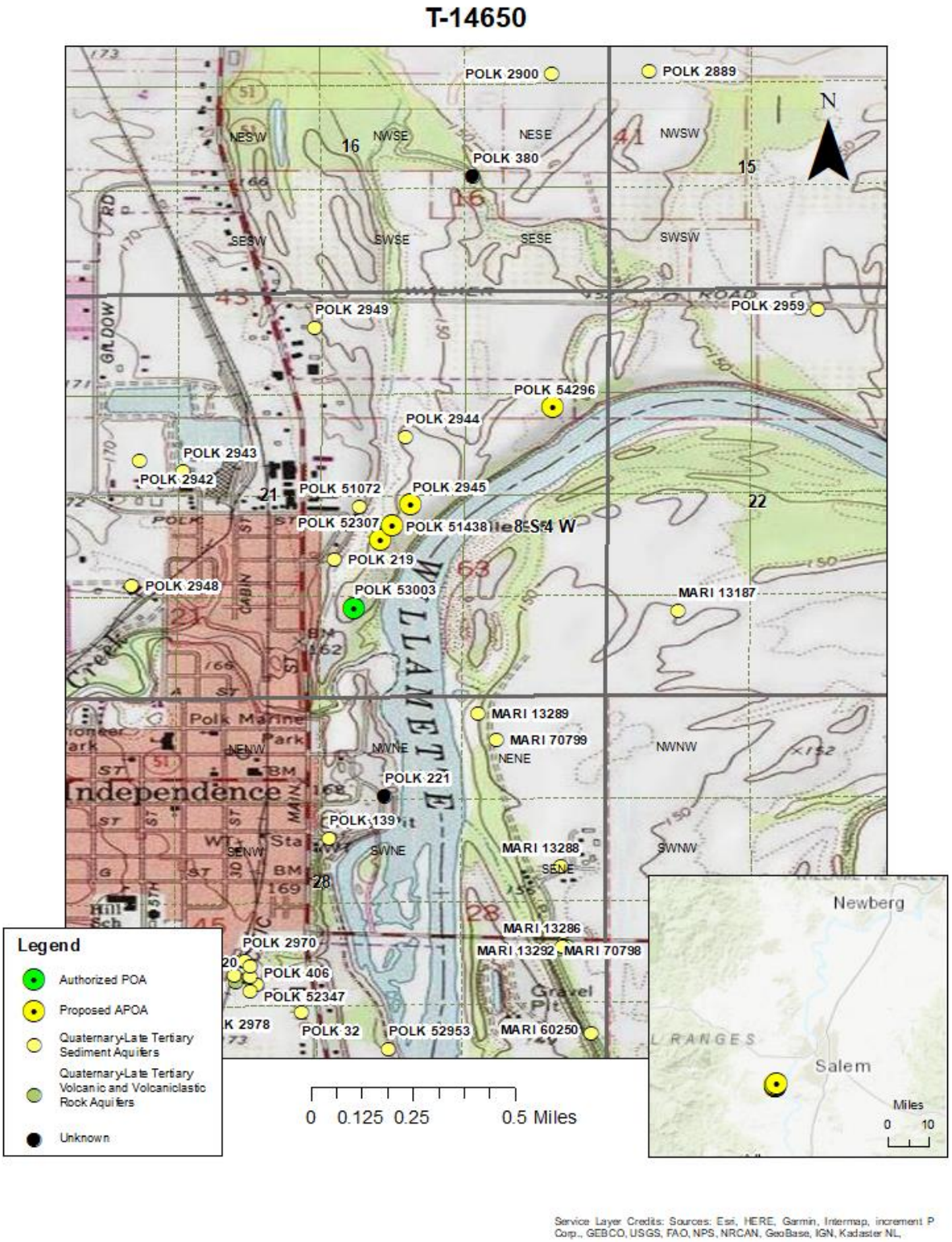
References:

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.

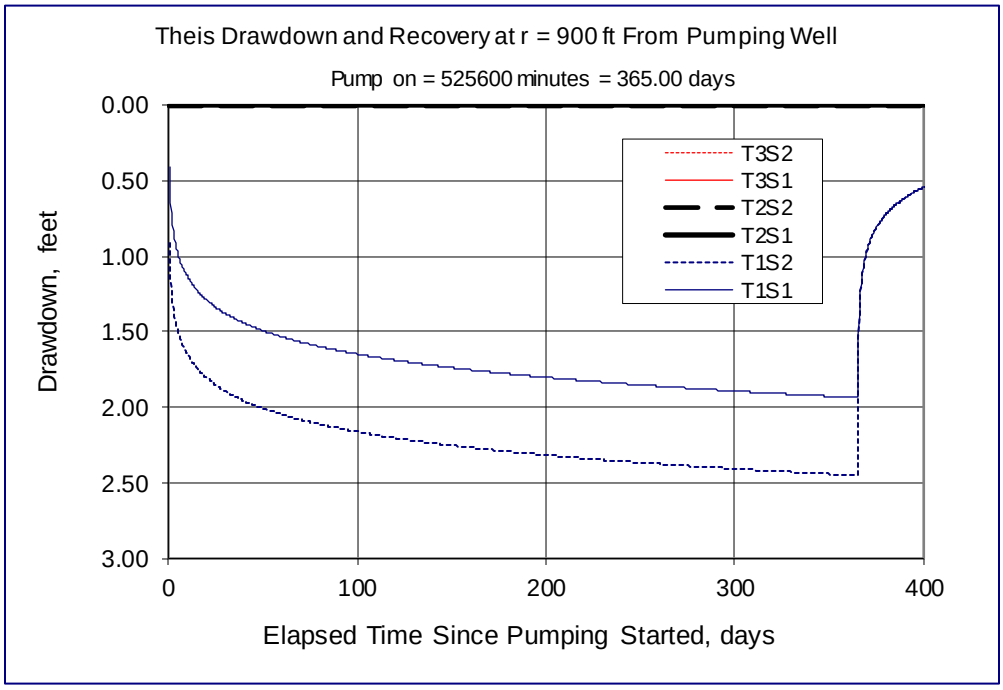
Gannett, M.W. and Caldwell, R., 1998, Geologic framework of the Willamette Lowland aquifer system, Oregon and Washington, Professional Paper 1424-A, 32 p: U. S. Geological Survey, Reston, VA.

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.

Location Map:



Well Interference Analysis (Theis, 1935):



Radial distance, r = 900 ft [approximate distance from APOA, POLK 2945 to POLK 2944]

Pumping time, t_{pump} = 365 days [year-round municipal use]

Pumping rate, Q = 0.56 cfs [max rate under Permit: G-17750]

Transmissivity: T1 = 17240 ft^2/day [median value from reported pumping tests for the Willamette Aquifer in the area]

Storativity: S1 = 0.003; S2 = 0.0003 [Conlon et al., 2005]