## **Groundwater Transfer Review Summary Form**

Transfer/PA # T- <u>14384</u>				
GW Reviewer <u>James Hootsmans/Travis Brown</u> Date Review Completed: <u>11/1/2024</u>				
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 vater to which it is legally entitled or result in significant interference with a surface water source as pe $690-380-0100(3)$ .				
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.				

Version: 20210204



(	Crann	ŀ	Water	r P	Ανίαν	Form:
•	CTI OUII	ш	wate		eview	roma

,	72 Sowater resources DEPARTMENT (5	Oregon Water Resource 25 Summer Street NE, alem, Oregon 97301-15 503) 986-0900 www.wrd.state.or.us	Suite A	☐ Water Right ☐ Permit Am ☐ GR Modifi ☐ Other	nendment	
App	olication: T- <u>143</u>	8 <u>84</u> Appl	icant Name: <u>D</u>	avid & Kristine Sh	umaker Rev. Living	<u>Trust</u>
Pro <sub>]</sub>	posed Changes:	POA ☐ USE	☐ APOA ☐ POU	☐ SW→GW ☐ OTHER	□ RA	
Rev	riewer(s): <u>Jam</u>	es Hootsmans/Tr	avis Brown		Date of Review: 11/1 rned to WRSD: 11/1	
	-	ovided in the app proved because:	lication is insu	fficient to evaluate	whether the propos	ed
	The water well affected by the		l with the appli	cation do not corre	espond to the water i	rights
					ion of the well const r proposed to be dev	
	Other					
1.	Basic description Appropriation the applicant p According to to withdrawal. Th 46688 with a r	ion of the changes (POA), LINN 62 proposed to replace the applicant, Well the proposed To-P	s proposed in the 84 (Owner Wester it with a difference of the 11-1 has collapsed to 127 (OA LINN 627)	his transfer: The exell-1), on GR-45 is erent POA, LINN (ed and is no longer 7 (Well-2) is an ap		2).
2.	∑ Yes  □ I     in Quaternary :	No Comments:	Both existing floodplain de	and proposed POA	existing authorized and on GR-45 are competed River and major	pleted
3.	a) Is there mor  ☐ Yes ☐ 1		=	der the right (e.g., l elop from alluviun	basalt and alluvium) <u>n.</u>	?
		-		lied by each of the roposed change (ra	sources and describ	e any

Page 1 of 5 Version: 20210204

Transfer Application: T- 14384

4.	a) Will this proposed change, at its maximum allowed rate of use, likely result in an incin interference with <b>another ground water right</b> ?			
	Yes Do Comments: The proposed To-POA is closer to neighboring water right POA 2 on Certificate 26891 (also POA 1 on Certificate 54829) compared to the existing POA; therefore, the proposed change will likely result in an increase in interference.			
	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 proposed To-POA is ~250 ft from the presumed location of POA 2 on Certificate 26891, rather than ~890 ft like the From-POA. Permit G-216 (which became Certificate 26891) noted POA 2 as 25 ft deep, with the depth to water estimated at 10 ft. Total depth of the Willamette Aquifer in this area is estimated at 60-80 ft, resulting in an estimated saturated thickness of 50-70 ft (Gannett & Caldwell, 1998; Woodward et al., 1998). The potential interference with neighboring POA 2 resulting from the proposed change was estimated using the Theis (1935) solution (see attached Well Interference Analysis). Results of the analysis indicate the proposed change is not likely to result in injury of the neighboring POA 2.			
5.	a) Will this proposed change, at its maximum allowed rate of use, likely result in an increase in interference with <b>another surface water source</b> ?			
	☐ Yes ☐ No Comments: The proposed POA is farther from surface water sources			
	than the existing POA.			
	b) If yes, at its maximum allowed rate of use, what is the expected change in degree of interference with any <b>surface water sources</b> resulting from the proposed change?			
	Stream:			
	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?  \[ \sum \text{Yes}  \text{No}  \text{Comments: NA} \]			
7.	What conditions or other changes in the application are necessary to address any potential issues identified above: $\underline{NA}$			
8.	Any additional comments: <u>NA</u>			
Ref	erences			
<u>App</u>	plication File: T-14384			
Cer	tificates: 26891, 46688, 54829			
Pun	nping Test Reports: LINN 4394, 4404, 6260, 6307, 6373			
<u>I</u>	Alon, 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.			

Page 2 of 5 Version: 20210204

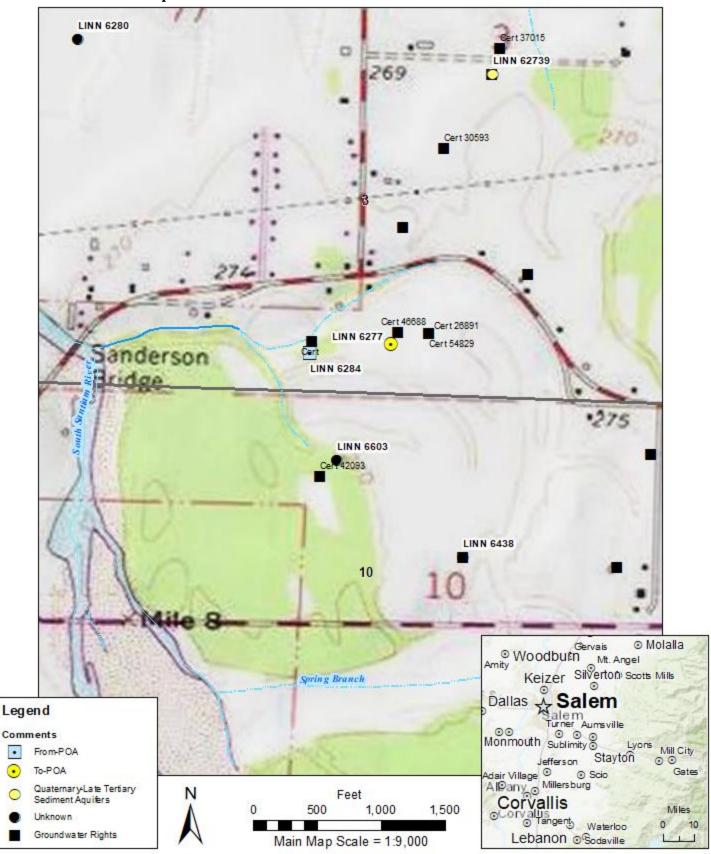
- Gannett, M.W. and Caldwell, R., 1998, Geologic framework of the Willamette Lowland aquifer system, Oregon and Washington, Professional Paper 1424-A, 32 p. U. S. Geological Survey, Reston, VA.
- Woodward, D.G., Gannett, M.W., and Vaccaro, J.J., 1998, Hydrogeologic framework of the Willamette Lowland aquifer system, Oregon and Washington: U.S. Geological Survey Professional Paper 1424-B, 82 p.

Page 3 of 5 Version: 20210204

## **Well Location Map**

## T14384 Shumaker

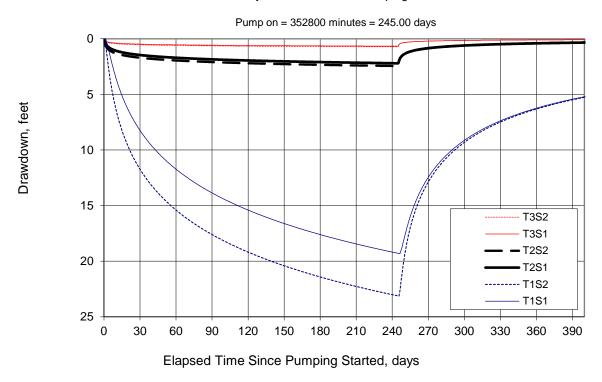
Version: 20210204



Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METi, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community
Copyright/© 2013 National Geographic Society, i-cubed

## Well Interference Analysis (Theis, 1935)

Theis Drawdown and Recovery at r = 250 ft From Pumping Well



Radial distance, r = 250 ft [distance from To-POA to POA 2 on Cert 26891]

Pumping rate, Q = 0.57 [maximum combined pumping rate of To-POA after proposed change]

Pumping time,  $t_{pump} = 245$  [full irrigation season]

Transmissivity:  $T1 = 700 \text{ ft}^2/\text{d} \mid T2 = 11,000 \text{ ft}^2/\text{d} \mid T3 = 45,000 \text{ ft}^2/\text{d} \text{ [pumping test reports]}$ 

Storativity:  $S1 = 0.2 \mid S2 = 0.1$  [Conlon et al., 2005]

Page 5 of 5 Version: 20210204