

Groundwater Transfer Review Summary Form

Transfer/PA # T- 13542

GW Reviewer Jen Woody Date Review Completed: 8/5/2021

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-13542

Applicant Name: MF Beef Bend, LLC

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

Reviewer(s): Jen Woody

Date of Review: 8/5/2021

Date Reviewed by GW Mgr. and Returned to WRSD: JTI 8/5/21

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: T-13542 proposes to change the place of use, character of use and add a point of appropriation to Certificate 51171. The currently authorized well is WASH 11873, a 392 foot deep well that accesses an aquifer within the Columbia River Basalt Group (CRBG). This right is located within the Cooper-Bull Mountain Critical Groundwater Area (CGWA).
 2. Will the proposed POA develop the same aquifer (source) as the existing authorized POA?
☒ Yes ☐ No Comments: The proposed APOA is described in the application as a 400 foot deep well that will access an aquifer within the CRBG. Groundwater within this portion of the CRBG is managed as a single aquifer per the CGWA Order (Special Order Vol. 24, Page 370).
 3. a) Is there more than one source developed under the right (e.g., basalt and alluvium)?
☐ Yes ☒ No See section 2 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.): 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: The new POA is 1200 feet closer to the southern taxlot boundary, which will increase drawdown by approximately 0.2 feet at the property line.

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: A reasonably efficient, fully penetrating well in this aquifer should have at least 200 feet of water above the bottom of the hole. A drawdown increase of 0.2 feet will not prevent access to sufficient groundwater rates or volumes.

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: CRBG flow features result in a series of stacked, thin aquifers that are confined by dense flow interiors. The low permeability of the basalt flow interiors usually results in little connection between stacked aquifers and local stream reaches that are not incised through the water-bearing zone. The new POA location is approximately the same distance from surface water as the original, therefore no change in stream depletion is expected.

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

Stream: _____ ☐ Minimal ☐ Significant

Provide context for minimal/significant impact: N/A

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: N/A

7. What conditions or other changes in the application are necessary to address any potential issues identified above: none

8. Any additional comments: none

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: U.S. Geological Survey Scientific Investigations Report 2005-5168.

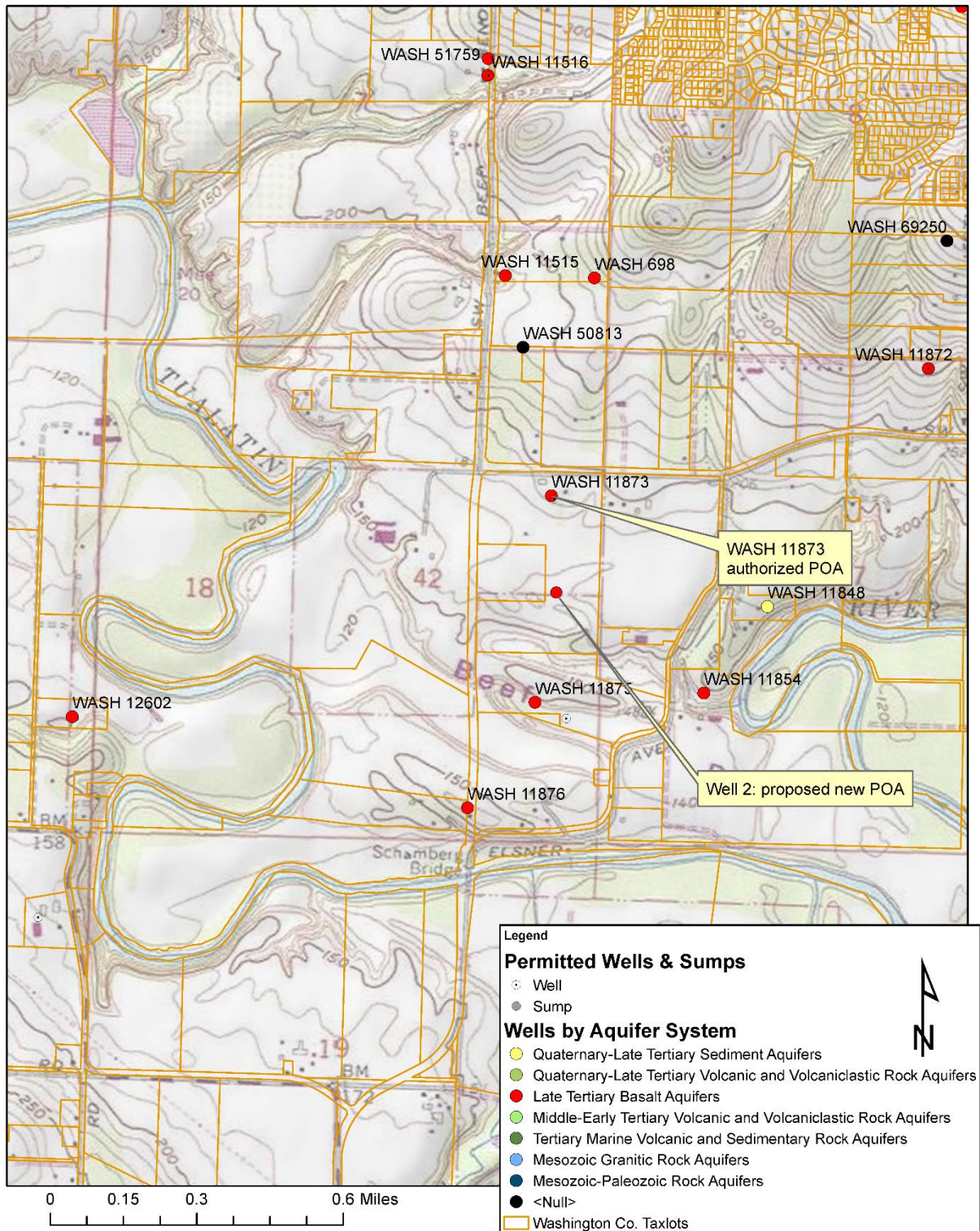
OWRD water level and well log databases, includes reported water levels and pump tests.

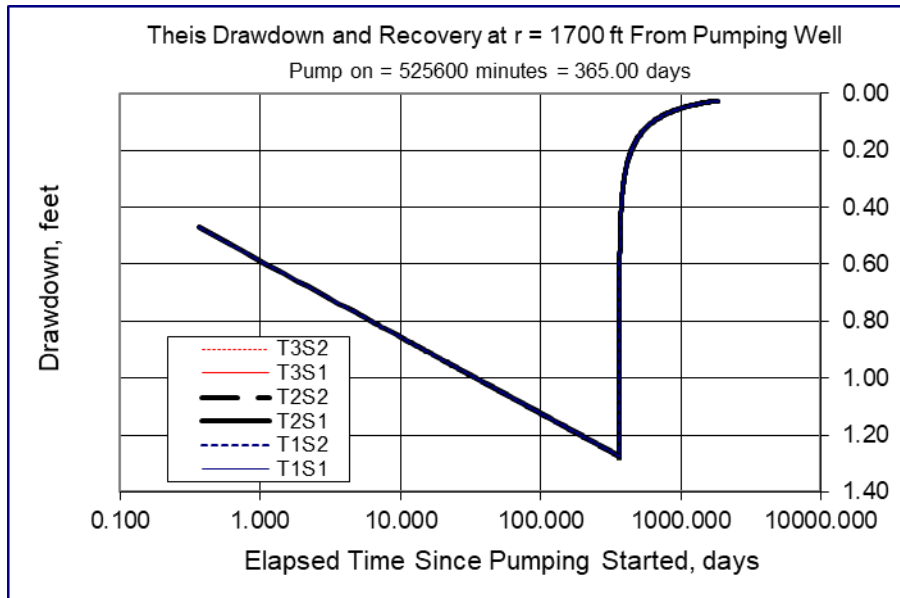
Theis, C.V., 1941, The effect of a well on the flow of a nearby stream: American Geophysical Union Transactions, v. 22, pt. 3, p. 734-738.

US Geological Survey Topographic Map, Beaverton Quadrangle.

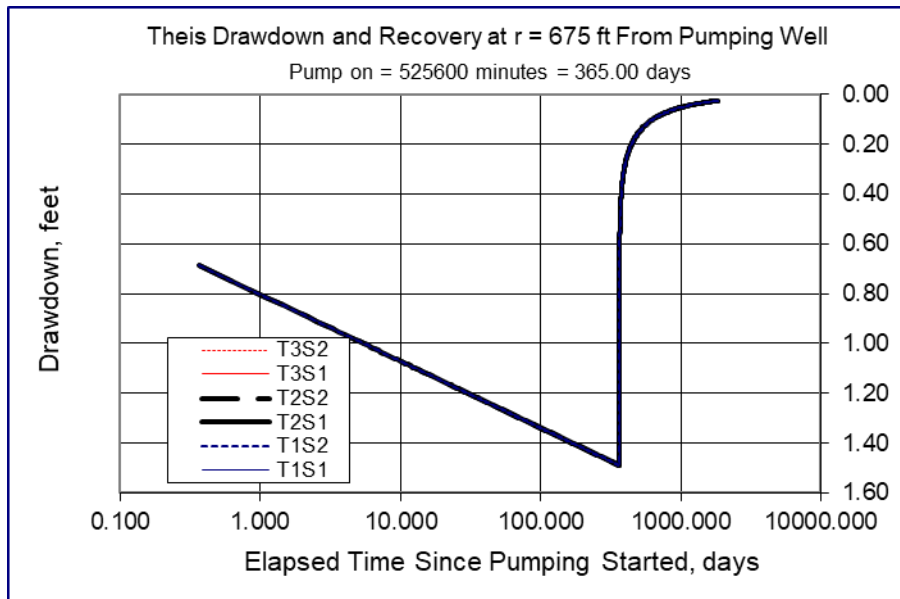
Well location Map

T-13542: MF Beef Bend, LLC: 2S/1W - Section 18



Well pumping drawdown estimates

Input Data:	Var Name	Scenario 1	Scenario 2	Scenario 3	Units
Total pumping time	t		365		d
Radial distance from pumped well:	r		1700		ft
Pumping rate	Q		152		gpm
Hydraulic conductivity	K	100	100	100	ft/day
Aquifer thickness	b		200		ft
Storativity	S_1		0.0001		
	S_2		0.0001		
Transmissivity Conversions	T_f2pd	20000	20000	20000	ft ² /day
	T_ft2pm	13.888889	13.888889	13.888889	ft ² /min
	T_gpdpft	149600	149600	149600	gpd/ft



Input Data:	Var Name	Scenario 1	Scenario 2	Scenario 3	Units
Total pumping time	t		365		d
Radial distance from pumped well:	r		675		ft
Pumping rate	Q		152		gpm
Hydraulic conductivity	K	100	100	100	ft/day
Aquifer thickness	b		200		ft
Storativity	S_1		0.0001		
	S_2		0.0001		
Transmissivity Conversions	T_f2pd	20000	20000	20000	ft ² /day
	T_ft2pm	13.888889	13.888889	13.888889	ft ² /min
	T_gpdpft	149600	149600	149600	gpd/ft