Groundwater Transfer Review Summary Form

Transfer/PA # T- _13470_

GW Reviewer _Darrick Boschmann_ Date Review Completed: _08/26/2020_

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-13470 Applicant Name: Ronald and Donna Wedel

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

Reviewer(s): Darrick E. Boschmann Date of Review: 08/26/2020

Date Reviewed by GW Mgr. and Returned to WRSD: JTI 9/11/2020

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:

This transfer application is related to certificates 91023 and 94941.

Certificate 91023 authorizes groundwater pumping from one well (POD 1 = HARN 1974) for primary irrigation of 125.0 acres in the Malheur Lake Basin. The following changes are proposed:
1. Add one APOA (HARN 52035) ~7.25 miles to the NW.
2. Transfer 40 acres of the POU from 24S/32E-4 to 23S/32.5E*-21.

Certificate 94941 authorizes groundwater pumping for one well (POD 1 = HARN 52035) for primary irrigation of 200.0 acres in the Malheur Lake Basin. The following changes are proposed:
1. Transfer 50 acres of the POU within the same section.

*Table 2 page 7 of the application indicates 32.5W – this appears to be in error.

2. Will the proposed POA develop the same aquifer (source) as the existing authorized POA?
☒ Yes ☐ No Comments: Available data indicates a predominantly volcanic/tuffaceous sedimentary rock unit occurs beneath a predominantly basin fill sediment unit. Reports for the Malheur Lake Basin indicate groundwater occurs in both the basin fill and underlying rocks. The groundwater is likely hydraulically connected, making a single groundwater system occurring in different geologic units. Leonard (1970) found that near the edges of the valley there is likely good interconnection between individual water-bearing beds in the valley fill and those in the adjacent and underlying tertiary rocks.

In general, groundwater in the Harney Basin flows from several upland recharge areas to a common discharge area near Malheur and Harney Lakes, with some apparent discharge to the Malheur Basin through one or more areas along the eastern margin. While the rocks and sediments making up the aquifer system in the Harney Basin do constitute a single groundwater flow system, sub-watersheds within the basin contribute recharge to different parts of the system depending on groundwater flow-paths from recharge to discharge areas. In general, within these sub-watersheds water within the aquifer system is sourced from a common recharge area, and can therefore be considered a single source.

3. a) Is there more than one source developed under the right (e.g., basalt and alluvium)?
☐ Yes ☒ No

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.):

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 changes proposed under certificate 91023 involve adding a POA and moving 40 acres of the POU to a location ~7.25 miles to the northwest. This will result in an incremental increase in interference with existing groundwater rights near this proposed location.

The changes proposed under certificate 94941 will not result in an increase in interference as no change is proposed for the authorized well.

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 40 acres transferred under certificate 91023 corresponds to a maximum instantaneous rate of 0.5 cfs (at 1/80th cfs/acre) and a prorated seasonal rate of 0.25 cfs (at 3 af/ac and 245 day irrigation season).

The nearest authorized POA is located over 1 mile away from the proposed well. At this distance, and at the rate and duty associated with the proposed 40 acres, any increased seasonal interference should be minimal.

Wells in this area are experiencing year-to-year water level declines (see hydrograph below). At the rate and duty associated with the proposed 40 acres any increase in this year-to-year decline should be minimal, and should not be sufficient to trip any decline conditions on these or any other water rights in this area.

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 location is further away from perennial surface water sources than the currently authorized well.

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

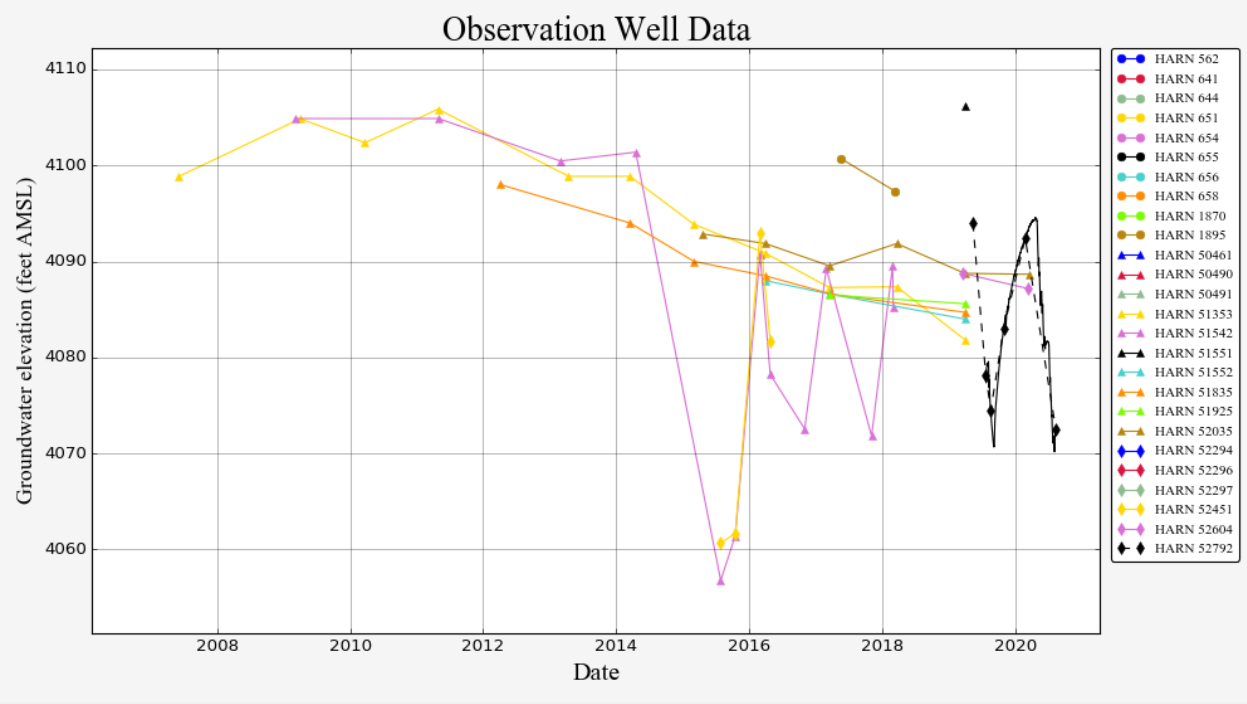
Provide context for minimal/significant impact: _____

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: none.

8. Any additional comments: none.


Observation Well Data
Groundwater elevation (feet AMSL)
4110
4100
4090
4080
4070
4060
2008
2010
2012
2014
2016
2018
2020
Date
HARN 562
HARN 641
HARN 644
HARN 651
HARN 654
HARN 655
HARN 656
HARN 658
HARN 1870
HARN 1895
HARN 50461
HARN 50490
HARN 50491
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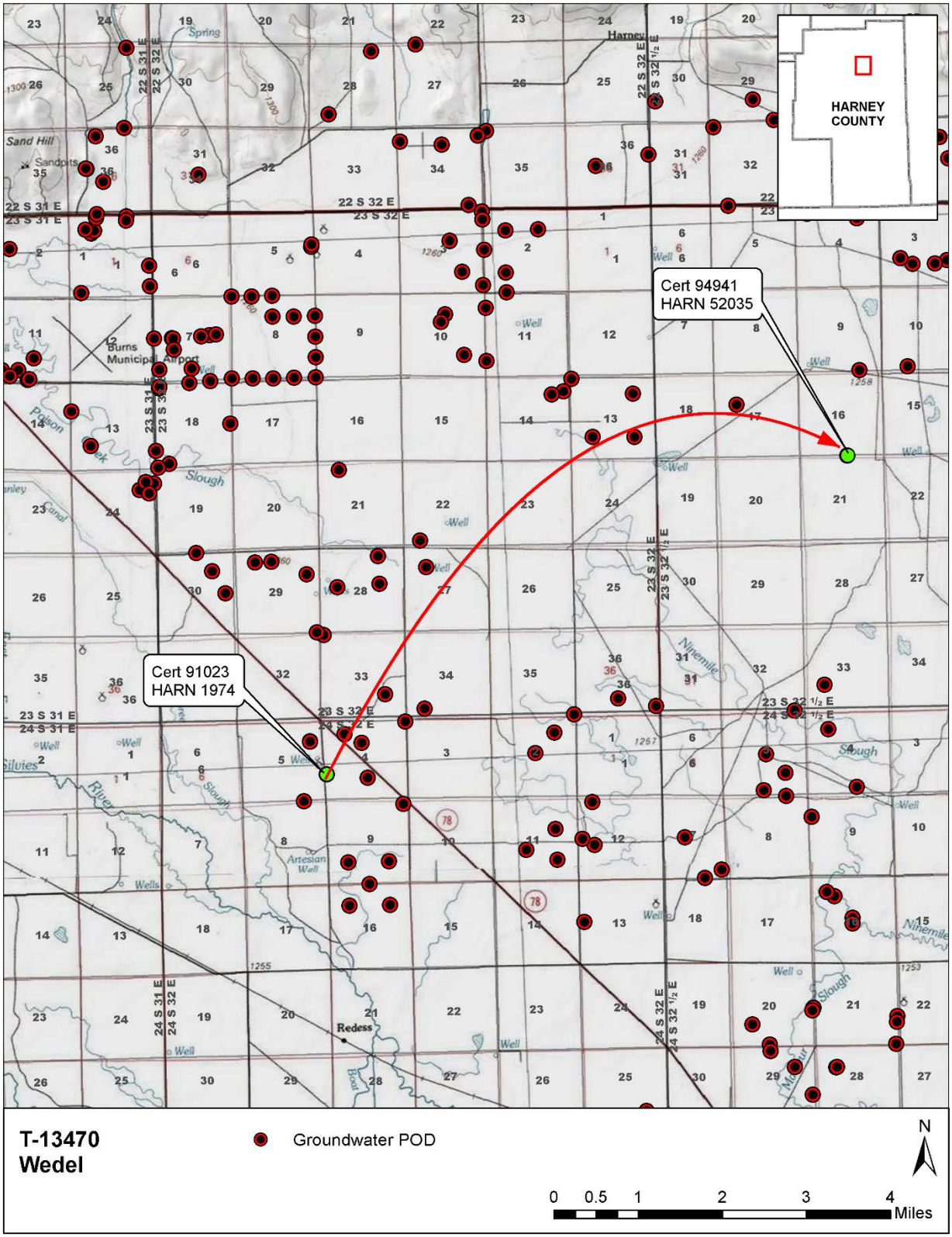
HARN 52451
HARN 52604
HARN 52792


HARNEY COUNTY
Cert 94941
HARN 52035
Cert 91023
HARN 1974
T-13470
Wedel
Groundwater POD
N
0 0.5 1 2 3 4
Miles