

Groundwater Application Review Summary Form

Application # G- 17193

GW Reviewer Darrick E. Boschmann Date Review Completed: 6/20/2025

Summary of GW Availability and Injury Review:

☐ Groundwater for the proposed use is either over appropriated, will not likely be available in the amounts requested without injury to prior water rights, OR will not likely be available within the capacity of the groundwater resource per Section B of the attached review form.

Summary of Potential for Substantial Interference Review:

☐ There is the potential for substantial interference per Section C of the attached review form.

Summary of Well Construction Assessment:

☒ The well does not appear to meet current well construction standards per Section D of the attached review form. Route through Well Construction and Compliance Section.

This is only a summary. Documentation is attached and should be read thoroughly to understand the basis for determinations and for conditions that may be necessary for a permit (if one is issued).

WATER RESOURCES DEPARTMENT

MEMO

6/20/2025

TO: Application G- 17193

FROM: GW: Darrick E. Boschmann
(Reviewer's Name)

SUBJECT: Scenic Waterway Interference Evaluation

☐ YES The source of appropriation is hydraulically connected to a State Scenic
☒ NO Waterway or its tributaries

☐ YES
☒ NO Use the Scenic Waterway Condition (Condition 7J)

☐ Per ORS 390.835, the Groundwater Section is **able** to calculate ground water interference with surface water that contributes to a Scenic Waterway. The calculated interference is distributed below

☐ Per ORS 390.835, the Groundwater Section is **unable** to calculate ground water interference with surface water that contributes to a scenic waterway; **therefore, the Department is unable to find that there is a preponderance of evidence that the proposed use will measurably reduce the surface water flows necessary to maintain the free-flowing character of a scenic waterway**

DISTRIBUTION OF INTERFERENCE

Calculate the percentage of consumptive use by month and fill in the table below. If interference cannot be calculated, per criteria in 390.835, do not fill in the table but check the "unable" option above, thus informing Water Rights that the Department is unable to make a Preponderance of Evidence finding.

Exercise of this permit is calculated to reduce monthly flows in [Enter] Scenic Waterway by the following amounts expressed as a proportion of the consumptive use by which surface water flow is reduced.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec

PUBLIC INTEREST REVIEW FOR GROUNDWATER APPLICATIONS

TO: Water Rights Section Date 6/20/2025
 FROM: Groundwater Section Darrick E. Boschmann
 Reviewer's Name
 SUBJECT: Application G- 17193 Supersedes review of 5/29/2009
 Date of Review(s)

PUBLIC INTEREST PRESUMPTION; GROUNDWATER

OAR 690-310-130 (1) *The Department shall presume that a proposed groundwater use will ensure the preservation of the public welfare, safety and health as described in ORS 537.525.* Department staff review groundwater applications under OAR 690-310-140 to determine whether the presumption is established. OAR 690-310-140 allows the proposed use be modified or conditioned to meet the presumption criteria. **This review is based upon available information and agency policies in place at the time of evaluation.**

A. GENERAL INFORMATION: Applicant's Name: BTAZ Nevada LLC (Whitehorse Ranch, LLC)
 County: Harney

A1. Applicant(s) seek(s) 4.8 cfs from 3 well(s) in the Malheur Lake Basin,
Alvord Lake (Whitehorse Creek/Willow Creek) subbasin

A2. Proposed use 609.9 acres Supplemental Irrigation Seasonality: March 1 – September 1

A3. Well and aquifer data (attach and number logs for existing wells; mark proposed wells as such under logid):

POA Well	Logid	Applicant's Well #	Proposed Aquifer*	Proposed Rate(cfs)	Location (T/R-S QQ-Q)	Location, metes and bounds, e.g. 2250' N, 1200' E fr NW cor S 36
1	MALH 2476	A	Volcanic and tuffaceous sedimentary rocks	2.12	37.00S-37.00E-31-SW NW	1560 FEET SOUTH AND 1770 FEET EAST FROM NW CORNER, SECTION 31
2	No Log*	C	Volcanic and tuffaceous sedimentary rocks	1.35	37.00S-36.00E-24-NW NE	1100 FEET SOUTH AND 288 FEET EAST FROM N1/4 CORNER, SECTION 24
3	HARN 1781	D	Volcanic and tuffaceous sedimentary rocks	1.34	37.00S-36.00E-13-SW SW	760 FEET NORTH AND 5 FEET EAST FROM SW CORNER, SECTION 13

* Alluvium, CRB, Bedrock

POA Well	Well Depth (ft)	Seal Interval (ft)	Casing Intervals (ft)	Liner Intervals (ft)	Perforations Or Screens (ft)	Well Yield (gpm)	Drawdown (ft)	Test Type
1	1,301	0-20	0-1,179	-	-	670	200	Pump
2*	900±	0-20	0-20	-	-	NA	NA	NA
3	593	0-19	0-240	-	90-230	400	165	Pump
4								

POA Well	Land Surface Elevation at Well (ft amsl)	Depth of First Water (ft bls)	SWL (ft bls)	SWL Date	Reference Level (ft bls)	Reference Level Date
1	4,561	1,205	58**	9/23/2007	52.00	01/20/1963
2	4,455	200±	86**	9/23/2007	NA	NA
3	4,429	90	166**	9/23/2007	74.50	10/23/1963
4						

Use data from application for proposed wells.

A4. **Comments:** _____

This re-review addresses the finding in section B1a in accordance with the 02/06/2023 clarification memo on the current policy for determining over-appropriation for new groundwater applications.

The proposed wells are located along Whitehorse Creek at the Harney-Malheur County line, approximately 23 miles northeast of the unincorporated community of Fields. The area underlying the proposed wells is mapped by Rytuba and others (1983) as Qal (alluvium), which is underlain in this area by QTc (conglomerate), Ttw (Tuff of Whitehorse Creek), Tb₁ (Basalt and sediments), Ttt (Tuff of Trout Creek Mountains), Trt (Rhyolite tuff), Tto (Tuff of Oregon Canyon), and other volcanic and tuffaceous units.

*No drillers' well log is available for POA 2 / well "C". The well construction information above is from the application materials and has not been verified. It is not known if this well meets current well construction standards. Route to WCC.

**Depth to water bearing zone and SWL data from applicant reported on application.

- A5. ☐ **Provisions of the** Malheur Lake Basin rules relative to the development, classification and/or management of groundwater hydraulically connected to surface water ☐ **are**, or ☒ **are not**, activated by this application. (Not all basin rules contain such provisions.)
Comments: _____

- A6. ☐ **Well(s) #** _____, _____, _____, _____, _____, tap(s) an aquifer limited by an administrative restriction.
Name of administrative area: _____
Comments: Currently no administrative area.

B. GROUNDWATER AVAILABILITY CONSIDERATIONS, OAR 690-310-130, 400-010, 410-0070

- B1. **Based upon available data**, I have determined that groundwater* for the proposed use:
- ☐ **is** over appropriated, ☒ **is not** over appropriated, or ☐ **cannot be determined to be** over appropriated during any period of the proposed use. * This finding is limited to the groundwater portion of the over-appropriation determination as prescribed in OAR 690-310-130;
 - ☐ **will not** or ☒ **will** likely be available in the amounts requested without injury to prior water rights. * This finding is limited to the groundwater portion of the injury determination as prescribed in OAR 690-310-130;
 - ☐ **will not** or ☐ **will** likely to be available within the capacity of the groundwater resource; or
 - ☒ **will, if properly conditioned**, avoid injury to existing groundwater rights or to the groundwater resource:
 - ☒ The permit should contain condition #(s) 7RLS (25 feet, 25 feet, period=March); large WUR;
 - ☐ The permit should be conditioned as indicated in item 2 below.
 - ☐ The permit should contain special condition(s) as indicated in item 3 below;
- B2. ☐ **Condition** to allow groundwater production from no deeper than _____ ft. below land surface;
- ☐ **Condition** to allow groundwater production from no shallower than _____ ft. below land surface;
- ☐ **Condition** to allow groundwater production only from the _____ groundwater reservoir between approximately _____ ft. and _____ ft. below land surface;
- ☐ **Well reconstruction** is necessary to accomplish one or more of the above conditions. The problems that are likely to occur with this use and without reconstructing are cited below. Without reconstruction, I recommend withholding issuance of the permit until evidence of well reconstruction is filed with the Department and approved by the Groundwater Section.

Describe injury –as related to water availability– that is likely to occur without well reconstruction (interference w/ senior water rights, not within the capacity of the resource, etc): _____

B3. Groundwater availability remarks: _____

Former State Observation Wells in this area were dropped in the 1990s (HARN 1783; HARN 1779; HARN 1782). HARN 1784 was also measured regularly by USGS from the 1960s through the mid-1980s.

The only other static water level measurements available in this area are those reported on drillers' well logs, and those reported in the application materials for the proposed wells under this application and application G-16845. These measurements indicate that proposed well HARN 1781 experienced 91.5 feet of decline from 1963 to 2007, and nearby well HARN 1786 experienced 84 feet of decline between 1963 and 2007 (see hydrograph attached). However, the reported 2007 measurements are late-season September measurements, are likely impacted by seasonal drawdown, and so do not represent the spring-high conditions necessary to evaluate year-to-year declines. The September 2007 SWL reported for proposed well MALH 2476, which is located further away from authorized groundwater points of appropriation, suggests just 6 feet of decline since 1963 even with the consideration of the late-season measurement.

The available water level record does not meet the Division 8 definition of excessively declining or declined excessively (for the *storage* portion of the source of water to wells).

The nearest authorized wells are over 8 miles away, and any interference resulting from the proposed use is unlikely to meet the standard for substantial or undue interference.

C. GROUNDWATER/SURFACE WATER CONSIDERATIONS, OAR 690-09-040**C1. 690-09-040 (1):** Evaluation of aquifer confinement:

Well	Aquifer or Proposed Aquifer	Confined	Unconfined
1	Volcanic and tuffaceous sedimentary rocks	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2	Volcanic and tuffaceous sedimentary rocks	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3	Volcanic and tuffaceous sedimentary rocks	<input type="checkbox"/>	<input checked="" type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>

Basis for aquifer confinement evaluation: _____

Some well logs in this area report static water levels above the depth at which water was first found. Other well logs in this area report static water levels below the depth at which water was first found. Shallow groundwater in this area is unconfined and semi-confined conditions likely exist with increasing depth.

C2. 690-09-040 (2) (3): Evaluation of distance to, and hydraulic connection with, surface water sources. All wells located a horizontal distance less than ¼ mile from a surface water source that produce water from an unconfined aquifer shall be assumed to be hydraulically connected to the surface water source. Include in this table any streams located beyond one mile that are evaluated for PSI.

Well	SW #	Surface Water Name	GW Elev ft msl	SW Elev ft msl	Distance (ft)	Hydraulically Connected?			Potential for Subst. Interfer. Assumed?	
						YES	NO	ASSUMED	YES	NO
1	1	Whitehorse Creek	4503	4572	1750	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2	1	Whitehorse Creek	4369	4572	13150	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3	1	Whitehorse Creek	4263	4572	16100	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Basis for aquifer hydraulic connection evaluation: _____

The groundwater elevation in this area is below the elevation of the nearest perennial reach of Whitehorse Creek.

The SW elevation cited above is the Lidar-based elevation of the nearest perennial reach of Whitehorse Creek in the NHD.

Water Availability Basin the well(s) are located within: WHITEHORSE CR > ALVORD DESERT - AT MOUTH

C3a. 690-09-040 (4): Evaluation of stream impacts for each well that has been determined or assumed to be **hydraulically connected and less than 1 mile** from a surface water (SW) source. Limit evaluation to instream rights and minimum stream flows that are pertinent to that SW source, not lower SW sources to which the stream under evaluation is tributary. Compare the requested rate against the 1% of 80% *natural* flow for the pertinent Water Availability Basin (WAB). If Q is not distributed by well, use full rate for each well. Any checked ☒ box indicates the well is assumed to have the potential to cause PSI.

Well	SW #	Well < ¼ mile?	Qw > 5 cfs?	Instream Water Right ID	Instream Water Right Q (cfs)	Qw > 1% ISWR?	80% Natural Flow (cfs)	Qw > 1% of 80% Natural Flow?	Interference @ 30 days (%)	Potential for Subst. Interfer. Assumed?
		<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>

C3b. **690-09-040 (4):** Evaluation of stream impacts by total appropriation for all wells determined or assumed to be **hydraulically connected and less than 1 mile** from a surface water source. **Complete only if Q is distributed among wells.** Otherwise same evaluation and limitations apply as in C3a above.

	SW #		Qw > 5 cfs?	Instream Water Right ID	Instream Water Right Q (cfs)	Qw > 1% ISWR?	80% Natural Flow (cfs)	Qw > 1% of 80% Natural Flow?	Interference @ 30 days (%)	Potential for Subst. Interfer. Assumed?
			<input type="checkbox"/>			<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>
			<input type="checkbox"/>			<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>

Comments: _____

 This section does not apply.

C4a. **690-09-040 (5):** Estimated impacts on **hydraulically connected surface water sources greater than one mile** as a percentage of the proposed pumping rate. Limit evaluation to the effects that will occur up to one year after pumping begins. This table encompasses the considerations required by 09-040 (5)(a), (b), (c) and (d), which are not included on this form. Use additional sheets if calculated flows from more than one WAB are required.

Non-Distributed Wells													
Well	SW#	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
		%	%	%	%	%	%	%	%	%	%	%	%
Well Q as CFS													
Interference CFS													
Distributed Wells													
Well	SW#	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
		%	%	%	%	%	%	%	%	%	%	%	%
Well Q as CFS													
Interference CFS													
		%	%	%	%	%	%	%	%	%	%	%	%
Well Q as CFS													
Interference CFS													
(A) = Total Interf.													
(B) = 80 % Nat. Q													
(C) = 1 % Nat. Q													
(D) = (A) > (C)		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
(E) = (A / B) x 100		%	%	%	%	%	%	%	%	%	%	%	%

(A) = total interference as CFS; (B) = WAB calculated natural flow at 80% exceed. as CFS; (C) = 1% of calculated natural flow at 80% exceed. as CFS; (D) = highlight the checkmark for each month where (A) is greater than (C); (E) = total interference divided by 80% flow as percentage.

Basis for impact evaluation: _____

 This section does not apply.

C4b. **690-09-040 (5) (b)** The potential to impair or detrimentally affect the public interest is to be determined by the Water Rights Section.

- C5. ☐ **If properly conditioned**, the surface water source(s) can be adequately protected from interference, and/or groundwater use under this permit can be regulated if it is found to substantially interfere with surface water:
- ☐ The permit should contain condition #(s) _____;
 - ☐ The permit should contain special condition(s) as indicated in "Remarks" below;

C6. **SW / GW Remarks and Conditions:** _____

C1. 690-09-040 (1)

It is determined that all proposed wells will produce water from an unconfined aquifer.

C2. 690-09-040 (2) (3)

It is determined that all proposed wells are not hydraulically connected with Whitehorse Creek.

C3a. 690-09-040(4)

This section does not apply.

C3b. 690-09-040(4)

This section does not apply.

C4a. 690-09-040(5)

This section does not apply.

References Used: _____

Rytuba, J.J., Minor, S.A., Vander Meulen, D.B., 1983. Reconnaissance geologic map of the Whitehorse Ranch quadrangle, Harney and Malheur Counties, Oregon. U.S. Geological Survey Open-File Report OF-83-284. Scale 1:24,000.

USGS National Hydrology Dataset

OWRD water well reports, water level data, and/or hydrographs

Oregon Administrative Rules

D. WELL CONSTRUCTION, OAR 690-200

- D1. Well #: C Logid: No well log
- D2. **THE WELL does not appear to meet current well construction standards based upon:**
- a. ☐ review of the well log;
 - b. ☐ field inspection by _____;
 - c. ☐ report of CWRE _____;
 - d. ☐ other: (specify) _____
- D3. **THE WELL construction deficiency or other comment is described as follows:** _____
- D4. ☒ **Route to the Well Construction and Compliance Section for a review of existing well construction.**

Water Availability Tables

DETAILED REPORT ON THE WATER AVAILABILITY CALCULATION

Watershed ID #: 31200901		WHITEHORSE CR > ALVORD DESERT - AT MOUTH			Exceedance Level: 80	
Time: 10:15 AM		Basin: MALHEUR LAKE			Date: 06/20/2025	
Month	Natural Stream Flow	Consumptive Use and Storage	Expected Stream Flow	Reserved Stream Flow	Instream Requirements	Net Water Available
Monthly values are in cfs.						
Storage is the annual amount at 50% exceedance in ac-ft.						
JAN	4.08	0.02	4.06	0.00	0.00	4.06
FEB	8.99	0.05	8.94	0.00	0.00	8.94
MAR	17.30	2.51	14.80	0.00	0.00	14.80
APR	37.60	11.80	25.80	0.00	0.00	25.80
MAY	45.00	30.00	15.00	0.00	0.00	15.00
JUN	24.80	24.20	0.58	0.00	0.00	0.58
JUL	5.70	8.08	-2.38	0.00	0.00	-2.38
AUG	2.49	3.23	-0.74	0.00	0.00	-0.74
SEP	2.19	1.67	0.52	0.00	0.00	0.52
OCT	2.35	0.82	1.53	0.00	0.00	1.53
NOV	3.43	0.01	3.42	0.00	0.00	3.42
DEC	4.11	0.01	4.10	0.00	0.00	4.10
ANN	20,300	4,990	15,300	0	0	15,300

G-17193
BTAZ Nevada
(Whitehorse Ranch)

- Authorized POA
- Proposed POA
- GW site (Well)
- Groundwater POD

0 0.25 0.5 1 Miles

N

Water-Level Measurements in Nearby Wells

