Groundwater Application Review Summary Form

Application # G- _19480 re-review_

GW Reviewer _Travis Brown_ Date Review Completed: _8/28/2025_

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 **_August 28, 2025_**

TO: **Application** G-**_19480 re-review_**

FROM: **GW:** **_Travis Brown_**
(Reviewer's Name)

SUBJECT: Scenic Waterway Interference Evaluation

☐ **YES**
☒ **NO** The source of appropriation is hydraulically connected to a State Scenic 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 8/28/2025

FROM: Groundwater Section Travis Brown
Reviewer's Name

SUBJECT: Application G- **19480 re-review** Supersedes review of 2/28/2025
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: **Wilma Eichler** County: **Yamhill**

A1. Applicant(s) seek(s) 0.05 cfs from 1 well(s) in the Willamette Basin, Coast Range subbasin

A2. Proposed use Irrigation (53.8 ac; 18.1 ac-ft/yr) Seasonality: April 1 – September 30 (183 days)

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	YAMH 55658	2	Bedrock	0.05	5S/4W-21 NE-SE	1395' N, 1035' W fr SE cor S 21

* 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	180	0-19	+1-19	3-180	140-180	40	Unknown	Airlift (2 hr)

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	272.36	32	24	7/8/2010	**TBD**	TBD

Use data from application for proposed wells.

A4. **Comments:** The proposed POA and POU are ~1 mile east of the city of Amity, OR. The requested annual volume – 18.1 ac-ft/yr (0.336 ft/yr) – is less than the standard duty – 134.5 ac-ft/yr (2.5 ft/yr) – for the irrigated acreage. The requested annual volume is equal to the volume of pumping at the requested rate (0.05 cfs) continuously for the entire requested duration (183 days).

A5. ☐ **Provisions of the** Willamette 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: The proposed POA is greater than ¼ mile from the nearest surface water source and is completed in the confined Tertiary Marine Volcanic and Sedimentary Aquifer; therefore, the relevant basin rules (OAR 690-502-0240) do not apply.

A6. ☐ **Well(s) #** **1** , _____ , _____ , _____ , _____ , tap(s) an aquifer limited by an administrative restriction.
Name of administrative area: **Amity Hills/Walnut Hill Groundwater Limited Area (OAR 690-502-0210)**
Comments: The proposed POA does not produce groundwater from a Columbia River Basalt Group Aquifer; therefore, the Amity Hills/Walnut Hill Groundwater Limited Area (OAR 690-502-0210) rules do not apply.

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:

a. ☐ **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;

b. ☐ **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;

c. ☐ **will not** *or* ☐ **will** likely to be available within the capacity of the groundwater resource; or

d. ☒ **will, if properly conditioned**, avoid injury to existing groundwater rights or to the groundwater resource:

i. ☒ The permit should contain condition #(s) **7RLN, Medium Water Use Reporting**;

ii. ☒ The permit should be conditioned as indicated in item 2 below.

iii. ☐ The permit should contain special condition(s) as indicated in item 3 below;

B2. a. ☐ **Condition** to allow groundwater production from no deeper than _____ ft. below land surface;

b. ☐ **Condition** to allow groundwater production from no shallower than _____ ft. below land surface;

c. ☒ **Condition** to allow groundwater production only from the **marine sedimentary** groundwater reservoir ~~between approximately _____ ft. and _____ ft. below land surface~~;

d. ☐ **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:** The proposed POA is completed in a low-yielding marine sedimentary rock aquifer within the Eocene Keasey Formation of the Keasey-Alsea Group per Brownfield and Schlicker (1981). Surficial geology in the area consists primarily of tuffaceous marine sedimentary deposits, poorly sorted alluvial deposits to the west, and Columbia River Basalt (upgradient) to the east. Inferred normal faults occur within one half mile of the POAs to the north and east (Schlicker and Brownfield, 1981). The nearest perennial surface water bodies are Salt Creek to the west and Ash Swale to the south, with several intermittent streams within one mile of the POA

A survey of well logs in T5S/R4W-Section 21 produced 32 well logs, with reported yields ranging from 0 to 90 gpm (See Well Statistics). The median yield is 10.5 gpm and most logs report claystone or siltstone with occasional sandstone or basalt. This is typical of the low-yield bedrock hydrogeologic unit identified at this location by Conlon et al. (2005). The requested rate of 22.4 gpm (0.05 cfs) is less than the reported yield of the proposed POA and should be well within the capacity of the resource.

Water level data from wells within 2 miles of the proposed POA indicates stability over the period of record, although only YAMH 157 had current water level data (see attached Hydrograph). The available evidence indicates that the aquifer is generally not over-appropriated.

The nearest known neighboring well is YAMH 7059, a domestic well ~1,000 ft north of the proposed POA. Potential interference with YAMH 7059 could not be quantitatively estimated due to the lack of an appropriate analytical model for the fractured rock aquifer. However, at the low requested rate, the proposed use is unlikely to injure YAMH 7059 or similarly located wells.

The conditions specified in B1(d) and B2(c) are recommended to protect senior users and the groundwater resource.

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	**Marine Sedimentary Bedrock**	☒	☐

Basis for aquifer confinement evaluation: Reports for nearby wells in the marine sedimentary bedrock show static water levels above the reported water-bearing zones, indicating confined conditions.

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? YES	NO	ASSUMED	Potential for Subst. Interfer. Assumed? YES	NO
1	**1**	**Tributary to Ash Swale**	**~248[a]**	**136-185[b]**	**~3,570**	☒	☐	☐	☐	☒

Basis for aquifer hydraulic connection evaluation: Groundwater elevations in the proposed POA and nearby wells are above the surface water elevations in SW 1, indicating groundwater flow towards the stream. The available evidence indicates the proposed POA is hydraulically connected to SW 1.

[a] From well report for YAMH 55658

[b] LIDAR elevations within 1 mile of proposed POA

Water Availability Basin the well(s) are located within: Salt CR > S Yamhill R – At Mouth (WID #73562)

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?
1	**1**	☐	☐	**N/A**	**N/A**	☐	**9.76**	☐	*****	☐

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?
			☐			☐		☐		☐

Comments: *Interference with SW 1 due to the proposed use could not be quantitatively estimated due to the lack of an appropriate analytical model for the hydrogeologic setting. However, given the distance between the proposed POA and SW 1, and the thickness of fine-grained sediments underlying SW 1, depletion of SW 1 is anticipated to be much less than 25 percent within 30 days of continuous pumping.

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													
(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: _____

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:

i. ☐ The permit should contain condition #(s)_____;

ii. ☐ The permit should contain special condition(s) as indicated in "Remarks" below;

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

References Used:

Brownfield, M.E., and Schlicker, H.G., 1981, Preliminary geologic map of the McMinnville and Dayton Quadrangles, Oregon [map, 1:24,000, Open File Report O-81-6, Oregon Department of Geology and Mineral Industries, Portland, OR.

D. WELL CONSTRUCTION, OAR 690-200

D1. **Well #**: _____ **Logid:** _____

D2. **THE WELL does not appear to meet current well construction standards based upon:**

a. ☐ review of the well log;

b. ☐ field inspection by _____;

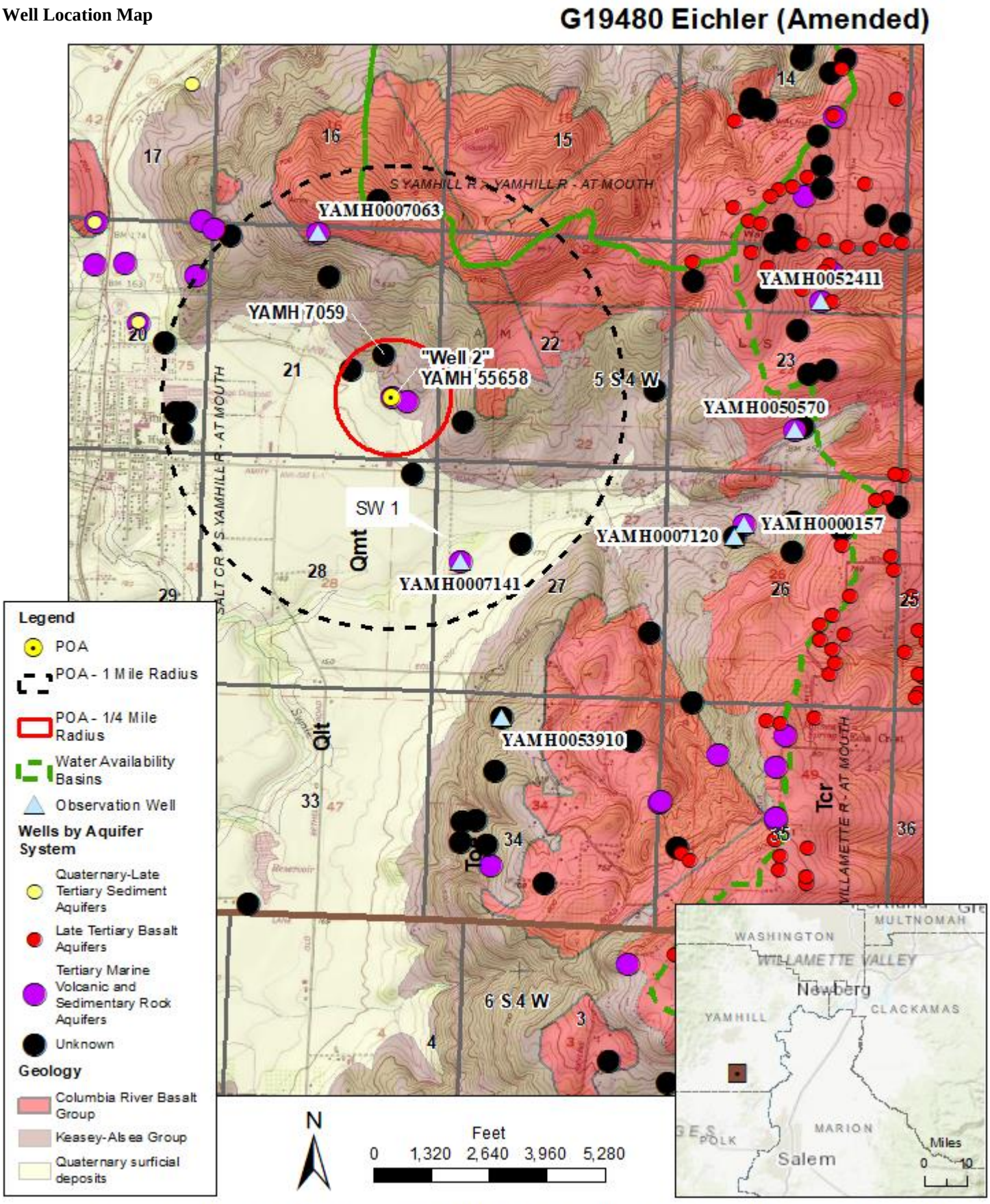
c. ☐ report of CWRE _____;

d. ☐ other: (specify) _____

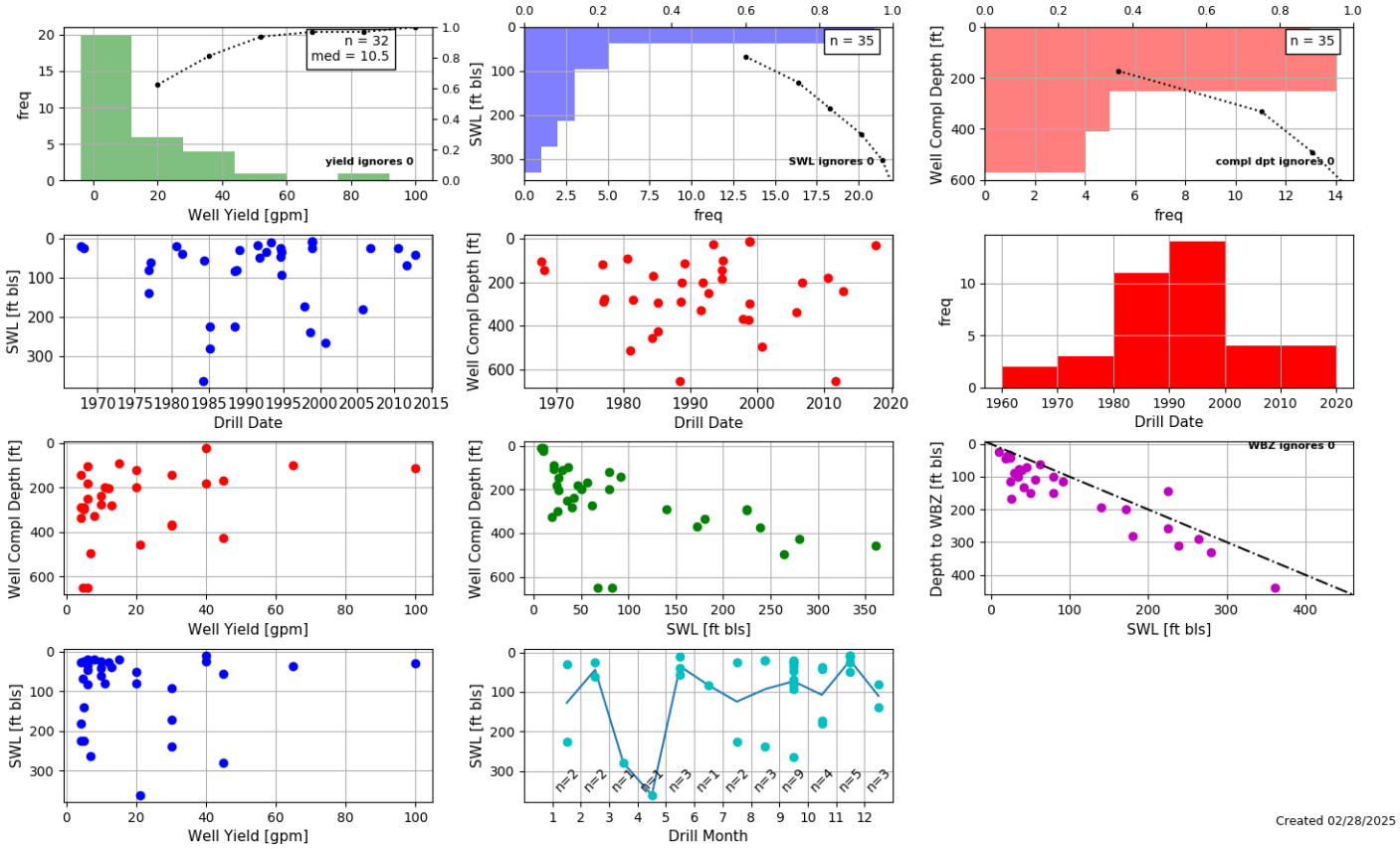
D3. **THE WELL construction deficiency or other comment is described as follows:** _____

D4. ☐ **Route to the Well Construction and Compliance Section for a review of existing well construction.**

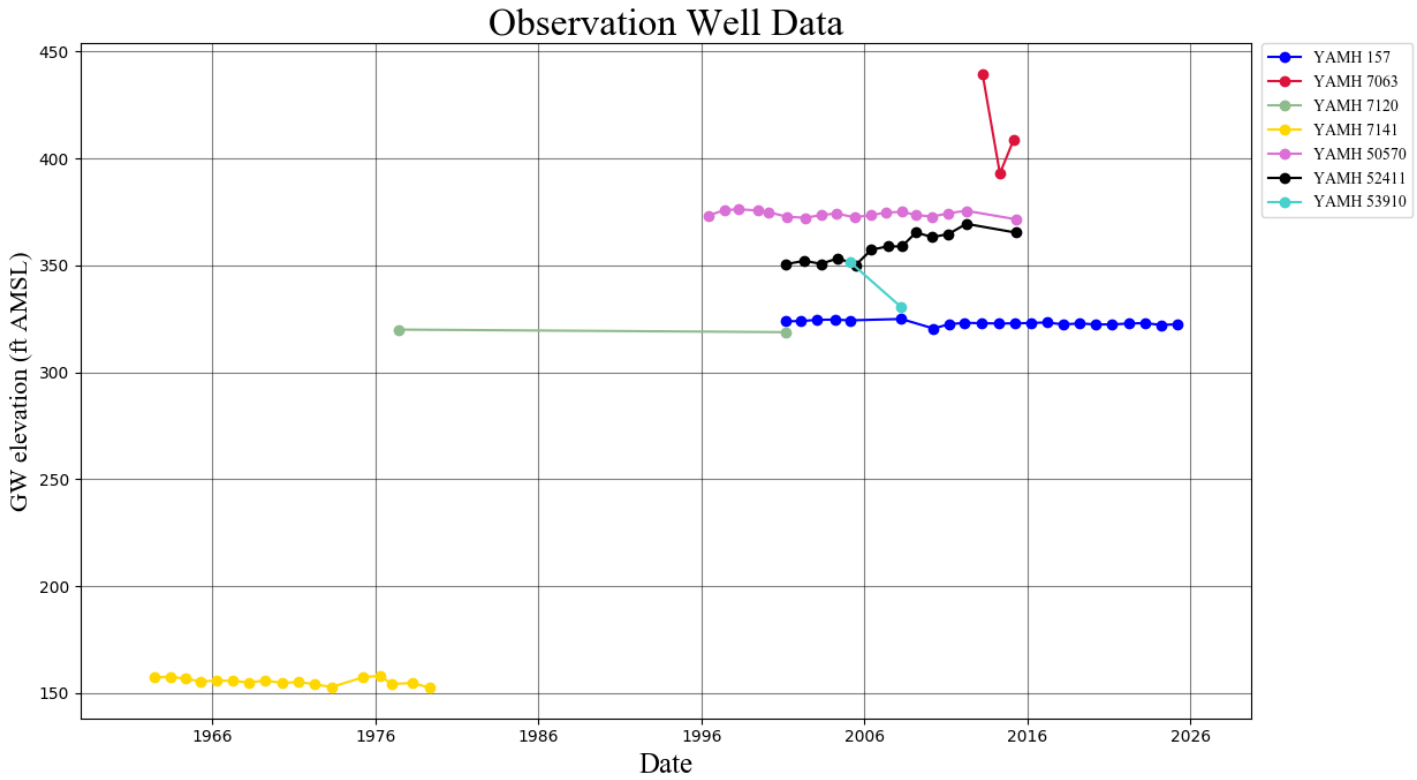
Well Location Map



Water Well Report Statistics – T5S/R4W-S21



Hydrograph



Water Availability Tables

Water Availability Analysis
Detailed Reports

SALT CR > S YAMHILL R - AT MOUTH
WILLAMETTE BASIN

Water Availability as of 8/28/2025

Watershed ID #: 73562 (Map)
Date: 8/28/2025

Exceedance Level: 80%
Time: 11:01 AM

Water Availability Calculation | Consumptive Uses and Storages | Instream Flow Requirements | Reservations | Water Rights | Watershed Characteristics

Water Availability Calculation

Monthly Streamflow in Cubic Feet per Second
Annual Volume at 50% Exceedance in Acre-Feet

Month	Natural Stream Flow	Consumptive Uses and Storages	Expected Stream Flow	Reserved Stream Flow	Instream Flow Requirement	Net Water Available
JAN	154.00	18.90	135.00	0.00	0.40	135.00
FEB	168.00	16.50	152.00	0.00	0.40	151.00
MAR	143.00	13.70	129.00	0.00	0.40	129.00
APR	75.10	5.85	69.20	0.00	0.40	68.80
MAY	43.90	7.30	36.60	0.00	0.40	36.20
JUN	27.30	14.90	12.50	0.00	0.40	12.10
JUL	18.30	18.40	-0.06	0.00	0.40	-0.46
AUG	12.90	14.70	-1.79	0.00	0.40	-2.19
SEP	9.76	7.39	2.37	0.00	0.40	1.97
OCT	10.00	1.19	8.83	0.00	0.40	8.43
NOV	22.40	4.48	17.90	0.00	0.40	17.50
DEC	107.00	17.40	89.50	0.00	0.40	89.10
ANN	92,900.00	8,490.00	84,500.00	0.00	290.00	84,300.00