

Groundwater Application Review Summary Form

Application # G- 19468

GW Reviewer Travis Brown Date Review Completed: 5/12/2025

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

5/12/2025

TO: Application G- 19468

FROM: GW: Travis Brown
(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 5/9/2025
 FROM: Groundwater Section Travis Brown
 Reviewer's Name
 SUBJECT: Application G- 19468 Supersedes review of _____
 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: Oregon Parks and Recreation Department County: Marion

A1. Applicant(s) seek(s) 0.45 cfs from 1 well(s) in the Willamette Basin,
Molalla River-Pudding River subbasin

A2. Proposed use Commercial (State Park) (323 af/yr) Seasonality: Year Round

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	MARI 55530	1	Basalt	0.45	8S/1E-26 NENW	1310' S, 1740' E fr NW cor S 26

* 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	1042	0-96; 96-365; 880-930	1.5-933	NA	NA	200	Unknown	Air

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	1745	32	690	1/4/2000	TBD	TBD

Use data from application for proposed wells.

A4. **Comments:** The proposed POA and POU are in Silver Falls State Park, ~7 miles northeast of the City of Stayton, Oregon.

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 develops a confined aquifer and is more than ¼ mile from the nearest hydraulically connected surface water; per OAR 690-502-0240, the relevant basin rules do not apply.

A6. ☐ **Well(s) #** _____, _____, _____, _____, _____, tap(s) an aquifer limited by an administrative restriction.

Name of administrative area: _____

Comments: The proposed POA is ~1,900 ft east (outside) of the Stayton-Sublimity Groundwater Limited 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:

- 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 (15 ft, 15 ft); 7t (dedicated measuring tube); large 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 **930** ft. below land surface;
 - c. ☒ **Condition** to allow groundwater production only from the **Columbia River Basalt** 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 (MARI 55530) develops a basalt aquifer at substantial depth (>930 ft bls [815 ft amsl]); based on geologic mapping for the area, the developed aquifer is most likely within the Columbia River Basalts (Norman, 1980; Yeats et al., 1996). The developed aquifer is confined, with a reported static water level (690 ft bls, 1/4/2000) several hundred feet above the noted upper water-bearing zone from 995-1000 ft bls (with an additional water-bearing zone noted from 1017-1023 ft bls with the same static water level).

The closest well with any time series water level data is MARI 15579, ~2.5 miles to the southwest of the proposed POA. MARI 15579 exhibited an overall decline in water level of ~56 ft between 1965 and 1989 but showed ~11 ft of recovery between 1989 and 1997, although it was still down ~45 ft from its highest value in 1965; more recent data was not available. The nearest well with recent water level data is MARI 18916, ~2.9 miles northeast of the proposed POA, which has shown an overall decrease in water level of ~8.5 ft since it was drilled in 1994 (see attached Hydrographs). Wells further to the north with current data show relative stability from the early 2000s through 2025 (see attached Hydrographs). However, between 1999 and 2002, MARI 54080 showed an overall decline of ~42.3 ft from the water level reported on its well completion report in 1999. Similarly, between 1999 and 2002, MARI 54278 showed an overall decline of ~31.0 ft from the water level reported on its well completion report in 1999. This pattern of steep initial decline followed by subsequent stabilization may indicate these wells (MARI 54080 and MARI 54278) commingle multiple aquifers. **The preponderance of the current water level data indicates the proposed aquifer is not over appropriated.**

MARI 68685, ~2 miles southwest of the proposed POA, is the nearest known neighboring well likely to produce from the same aquifer as the proposed POA. **Given the substantial intervening distance, it is unlikely that the proposed use will cause injury or exceed the standard permit condition limits on interference with MARI 68685 or similarly located wells.**

To protect senior users and the groundwater resource, the conditions specified in B1(d) and B2 are strongly recommended for any permit issued pursuant to this application. In addition, the following Special Conditions should be applied:

1. Any well constructed or deepened under this or subsequent permits shall be open to a single aquifer of the Columbia River Basalt Group and shall meet the applicable well construction standards (OAR 690-200 and OAR 690-210).

In addition, the open interval in each well shall be no greater than 100 feet. An open interval of greater than 100 feet may be allowed if substantial evidence of a single aquifer completion can be demonstrated to the satisfaction of the Department Hydrogeologists, using information from a video log, downhole flowmeter, water chemistry and temperature, or other downhole geophysical methods. These methods shall characterize the nature of the basalt rock and assess whether water is moving in the borehole. Any discernable movement of water within the well bore when the well is not being pumped shall be assumed as evidence of the presence of multiple aquifers in the open interval.

If during well construction, it becomes apparent that the well can be constructed to eliminate interference with hydraulically connected streams in a manner other than specified in this permit, the permittee can contact the Department Hydrogeologist for this permit or the Ground Water/Hydrology Section Manager to request approval of such construction. The request shall be in writing and shall include a rough well log and a proposed construction design for approval by the Department. The request can be approved only if it is received and reviewed prior to placement of any permanent casing and sealing material. If the request is made after casing and seal are placed, the requested modification will not be approved. If approved, the new well depth and construction specifications will be incorporated into any certificate issued for this permit.

2. When requested, access to the wells shall be provided to Department staff in order to make water-level measurements.
3. For any wells constructed or deepened under this or subsequent permits, the applicant shall coordinate with the driller to ensure that drill cuttings are collected at 10 ft intervals and at changes in formation in each well. A split of each sampled interval shall be provided to the Department.
4. If any geologic and hydrogeologic reports are completed for the permittee during the development of permitted wells, including geophysical well logs and borehole video logs, then copies of the reports shall be provided to the Department. Except for borehole video logs, two paper copies, or a single electronic copy, shall be provided of each report. Digital tables of any data shall be provided upon request.

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	Basalt	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Basis for aquifer confinement evaluation: Columbia River Basalt aquifers (i.e., separate interflow zones) are typically confined by dense flow interiors which restrict vertical movement of groundwater. In addition, the well log for the proposed POA and nearby well logs indicate confined conditions as water levels are rising above the water bearing zones.

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	Smith Creek	~1,055 ^a	~1,360 ^b	5,280	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
1	2	Unnamed Tributary to South Fork Silver Creek	~1,055 ^a	~1,370 ^b	5,280	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
1	3	Unnamed Tributary to East Fork Drift Creek	~1,055 ^a	~1,250	5,280	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
1	4	East Fork Drift Creek	~1,055 ^a	~1,225 ^b	5,280	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
1	5	Unnamed Tributary to West Fork Drift Creek	~1,055 ^a	~1,235 ^b	5,280					
1	6	West Fork Drift Creek	~1,055 ^a	~1,345 ^b	5,280	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
1	7	Mill Creek	~1,055 ^a	~815 ^b	~15,000	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Basis for aquifer hydraulic connection evaluation: The proposed POA is cased to 930 feet bls and sealed to 930 feet bls. None of the surface water sources within 1 mile of the proposed POA have incised to the depth of the water-bearing zone developed by the proposed POA. The nearest surface water that is likely hydraulically connected to the POA is Mill Creek, ~2.8 miles to the southwest.

^a Well report for MARI 55530.

^b LIDAR.

Water Availability Basin the well(s) are located within: SW 1-2: SILVER CR > PUDDING R - AT MOUTH
SW 3-6: DRIFT CR > PUDDING R - AT MOUTH
SW 7: MILL CR > WILLAMETTE R - 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?	Q _w > 5 cfs?	Instream Water Right ID	Instream Water Right Q (cfs)	Q _w > 1% ISWR?	80% Natural Flow (cfs)	Q _w > 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"/>

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"/>

Comments: Based on the existing well construction, no streams within 1 mile of the POA are hydraulically connected.

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: Depletion of the nearest hydraulically connected stream (SW 7/Mill Creek) could not be quantitatively estimated due to the lack of an appropriate analytical model for the hydrogeologic setting.

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:** None

References Used: Application File: G-19468

Norman, E. S., 1980, Geology of the Columbia River Basalt in Silver Falls State Park, Oregon: University Honors Thesis, Portland State University, Portland, OR, 43 p.

Yeats, R. S., Graven, E. P., Werner, K. S., Goldfinger, C., Popowski, T. A., 1996, Geologic map of the central and southern Willamette Valley, Benton, Lane, Linn, Marion, and Polk Counties, Oregon, USGS Professional Paper 1560, Plate 2B.

D. WELL CONSTRUCTION, OAR 690-200

D1. Well #: _____ Logid: _____

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

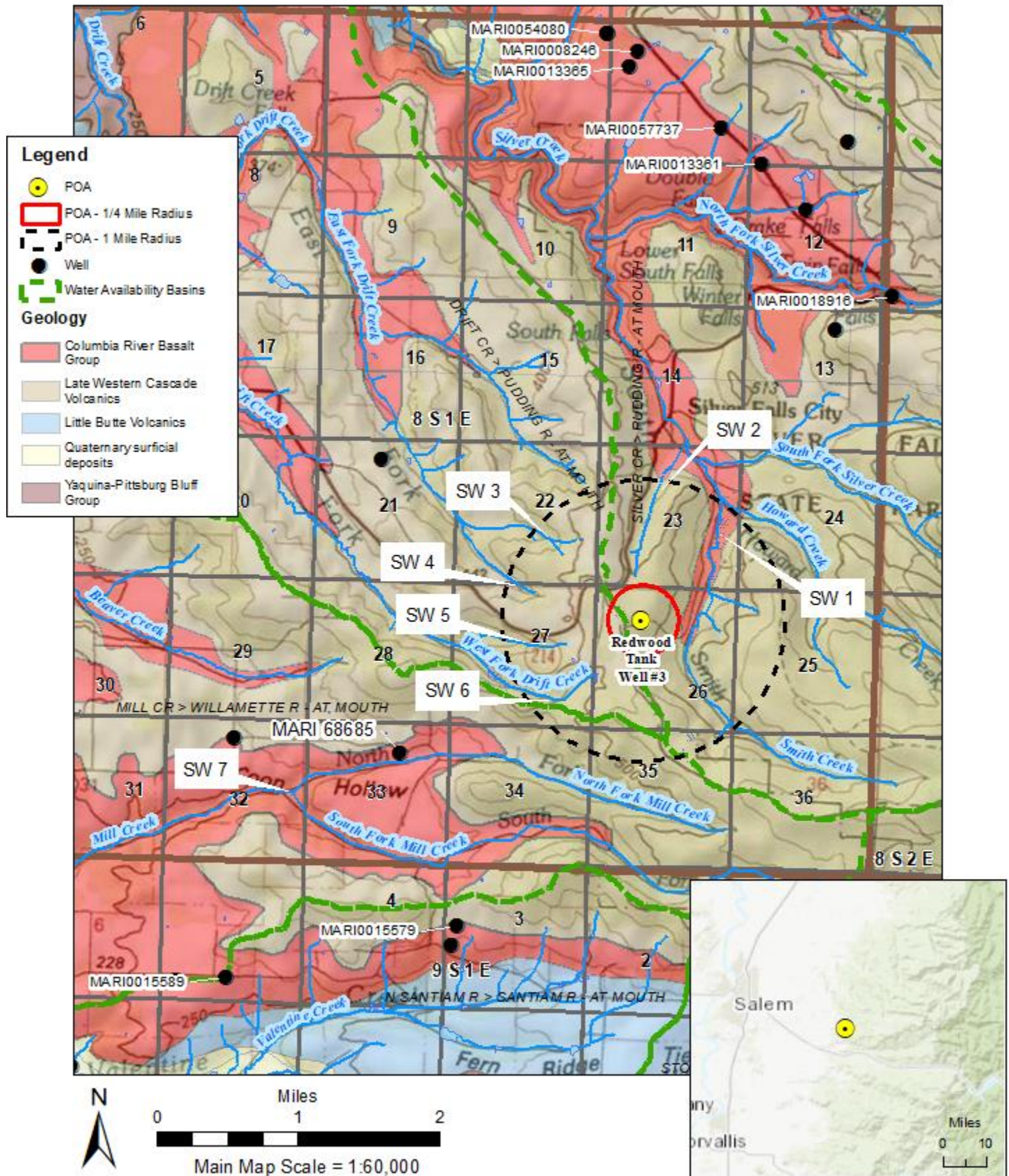
- a. ☐ review of the well log;
- b. ☐ field inspection by _____;
- c. ☐ report of CWRE _____;
- d. ☐ other: (specify) _____

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

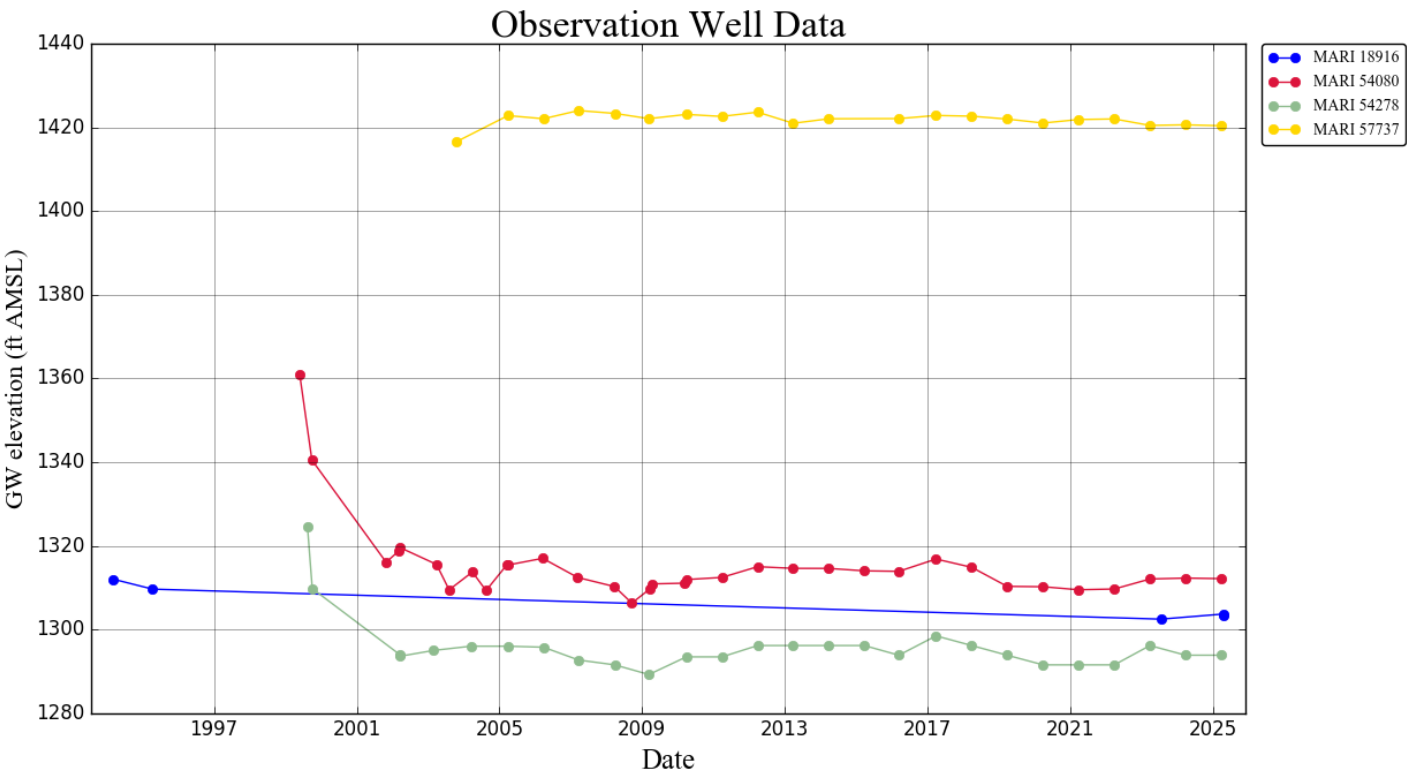
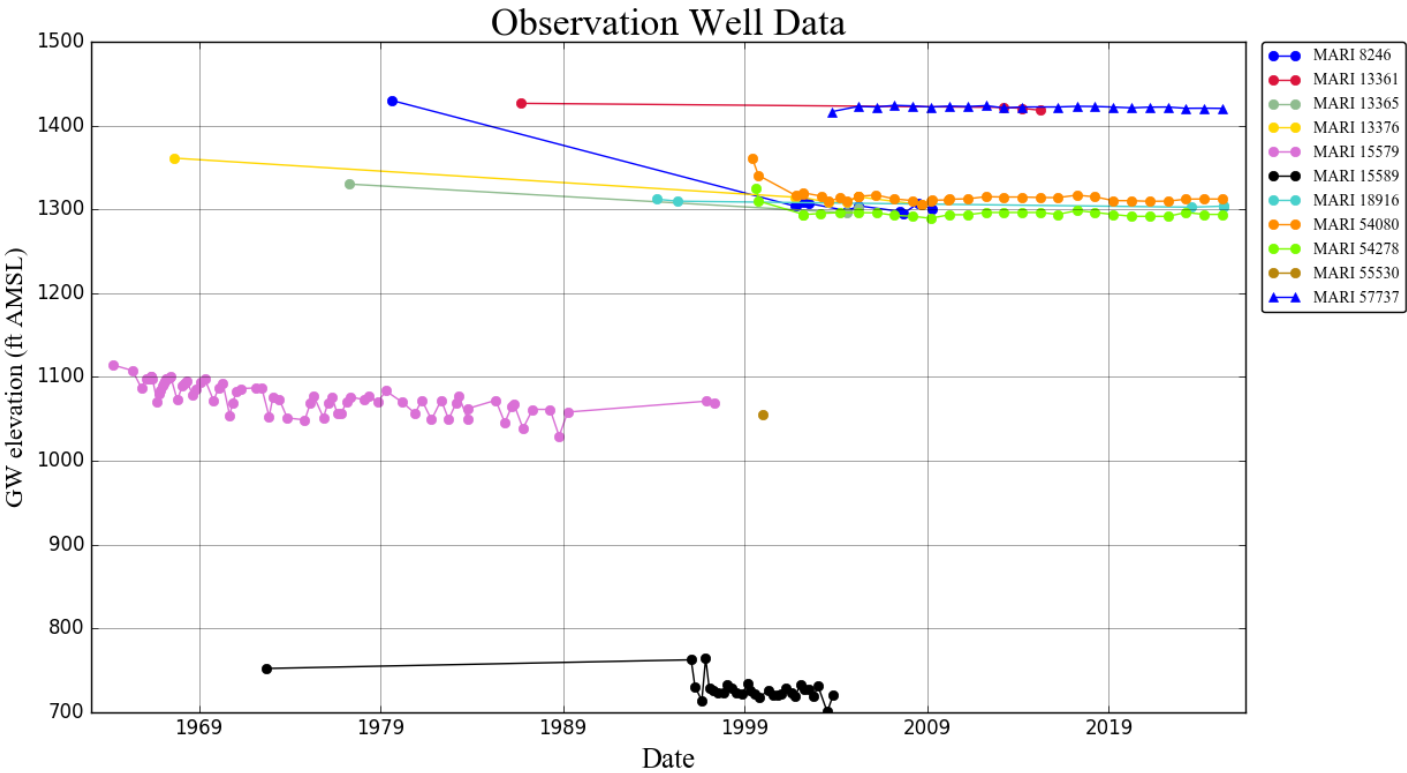
D4. ☐ **Route to the Well Construction and Compliance Section for a review of existing well construction.**

Well Location Map

G-19468



Hydrographs



Water Availability Tables

Water Availability Analysis

Detailed Reports

MILL CR > WILLAMETTE R - AT MOUTH
WILLAMETTE BASIN

Water Availability as of 5/8/2025

Watershed ID #: 30200701 ([Map](#))

Exceedance Level: 80% ▾

Date: 5/8/2025

Time: 5:06 PM

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	236.00	69.90	166.00	0.00	0.00	166.00
FEB	224.00	67.80	156.00	0.00	0.00	156.00
MAR	206.00	67.60	138.00	0.00	0.00	138.00
APR	155.00	67.50	87.50	0.00	0.00	87.50
MAY	78.30	68.00	10.30	0.00	0.00	10.30
JUN	40.70	66.30	-25.60	0.00	0.00	-25.60
JUL	20.60	65.20	-44.60	0.00	0.00	-44.60
AUG	16.30	70.30	-54.00	0.00	0.00	-54.00
SEP	17.20	69.10	-51.90	0.00	0.00	-51.90
OCT	20.30	66.90	-46.60	0.00	0.00	-46.60
NOV	59.30	67.00	-7.72	0.00	0.00	-7.72
DEC	167.00	69.00	98.00	0.00	0.00	98.00
ANN	135,000.00	49,200.00	96,200.00	0.00	0.00	96,200.00