Groundwater Application Review Summary Form

Application # G- <u>19112</u>
GW Reviewer <u>Joe Kemper</u> Date Review Completed: <u>6/30/2023</u>
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 <u>6/30/2023</u>

TO: Application G- 19112

FROM: GW: Joe Kemper (Reviewer's Name)

SUBJECT: Scenic Waterway Interference & General/Local Surface Water Evaluation for Deschutes Ground Water Study Area

The source of appropriation is within or above the <u>Deschutes</u> Scenic Waterway

Use the Scenic Waterway condition (Condition 7J).

PREPONDERANCE OF EVIDENCE FINDING UNDER ORS 390.835:

Department has found that there is a preponderance of evidence that the proposed use of groundwater will measurably reduce the surface water flows necessary to maintain the free-flowing character of the <u>Deschutes</u> Scenic Waterway in quantities necessary for recreation, fish and wildlife.

LOCALIZED IMPACT FINDING

The proposed use of groundwater will have a localized impact to surface water in the <u>Middle Deschutes</u> River/Creek Subbasin.

If the localized impact box above is checked, then the water use under any right issued pursuant to this application is presumed to have a localized impact on surface water within the identified subbasin. Mitigation of the impact, originating from within the Local Zone of Impact identified by the Department, will be required before a permit may be issued for the proposed use.

If the localized impact box above is not checked, then the water use under any right issued pursuant to this application is presumed to have a general (regional) impact on surface water. Mitigation of the impact, originating anywhere within the Deschutes Basin above the Madras gage, will be required before a permit may be issued for the proposed use.

PUBLIC INTEREST REVIEW FOR GROUNDWATER APPLICATIONS

TO:		Water	Rights Secti	on			Date6/30/2023						
FROM:	:			Joe Kemper Reviewer's Name									
SUBJE	CT:	Appli	cation G1	9112	5				11/29/2021				
~		P P			- T				D	Date of Review(s)			
OAR 69 welfare, to determ	00-310-13 safety and nine whet	0 (1) <i>T</i> d healt her the	PRESUMP The Department the as described to presumption This review in	at shall pre d in ORS 5 is establis	esume that 537.525. De hed. OAR	<i>a proposea</i> epartment s 690-310-14	<i>l ground</i> taff rev 40 allov	iew g	groundwater a e proposed use	pplications un be be modified	der OAR or conditi	690-310 oned to 1	-140 meet
A. <u>GE</u>	NERAL :	INFO	RMATION:	: App	plicant's Na	ame: <u>D</u>	amon .	Jones	S	Co	ounty: <u>I</u>	<u>Deschute</u>	S
A1.		oplicant(s) seek(s) <u>0.0557</u> cfs from <u>1</u>											Basin,
	M	<u>liddle l</u>	Deschutes			subbas	sin						
A2.	Proposed	l use _	Nurser	y (3.6 ac)		Seaso	nality:	Yea	ar-Round (6 A	F annually)			
A3.	Well and	aquife	er data (attach	and num	ber logs fo	or existing	wells;	marl	k proposed w	ells as such u	nder logi	d):	
Well	Logid		Applicant's Well #	Propose	Proposed Aquifer*		Proposed		Location C/R-S QQ-Q)	Location, metes and bounds, e.g.			
1	PROPOSED		1	Ве	Bedrock		Rate(cfs) 0.0557		00S-12.00E-21- NW SE	2250' N, 1200' E fr NW cor S 36 210 FEET SOUTH AND 260 FEET EAST FROM C1/4 CORNER, SECTION 21			
3													
4													
* Alluviu	ım, CRB, E	3edrock											
Well	Well Elev ft msl 3820	Firs Wate ft bl	er SWL	SWL Date	Well Depth (ft) 435	Seal Interval (ft)	Casi Interv (ft)	als	Liner Intervals (ft)	Perforations Or Screens (ft)	Well Yield (gpm)	Draw Down (ft)	Test Type
Lica data	from appli	cation f	or proposed we	11 _e									
A4.			OA is a propos		SWL is esti	mated fron	n two w	ells r	recently drilled	d in the same s	section		
A5. 🔀	managen (Not all b	nent of pasin ri	he <u>Deschutes</u> groundwater ules contain su e proposed PC	hydraulica ich provisi	ally connecions.)	ted to surfa	ice wate	er 🗵	are, or 🗆 a				
А6. 🗆	Name of	admin	istrative area:									ntive restr	riction.

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

Bas	sed 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.	\square will not or \square 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.	\square will not or \square 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) 7C (7-yr SWL); 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;
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
	Condition to allow groundwater production only from the 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):
	bundwater availability remarks: Updated water level data in the area indicates that there is not a preponderance of dence that groundwater storage in the target aquifer is over-appropriated at this time.

C. GROUNDWATER/SURFACE WATER CONSIDERATIONS, OAR 690-09-040

Impacts to surface water are addressed by the Deschutes Basin Rules (OAR 690-505)

References Used:

Gannett, M. W. and K. E. Lite. 2004. Simulation of Regional Ground-Water Flow in the Upper Deschutes Basin, Oregon. USGS Water Resources Investigations Report 2003-4195

Gannett, M. W. and K. E. Lite. 2013. Analysis of 1997-2009 Groundwater Level Changes in the Upper Deschutes Basin, Central Oregon. USGS Scientific Investigations Report 2013-5092

Gannett, M. W., Lite, K. E., Risley, J. C., Pischel, E. M., and J. L. LaMarche. 2017. Simulation of Groundwater and Surface-Water Flow in the Upper Deschutes Basin, Oregon. USGS Scientific Investigations Report 2017-5097

<u>Lite, K. E. and M. W. Gannett. 2002. Geologic Framework of the Regional Ground-Water Flow System in the Upper Deschutes Basin, Oregon. USGS Water-Resources Investigations Report 02-4015</u>

McClaughry, J. D., Ferns, M. L., and C. L. Gordon. 2021. Geology of the North Half of the Lower Crooked River Basin, Crook, Deschutes, Jefferson, and Wheeler Counties, Oregon. DOGAMI Bulletin 108.

OWRD Well Log Database, Accessed 11/29/2021 [https://apps.wrd.state.or.us/apps/gw/well log/Default.aspx]

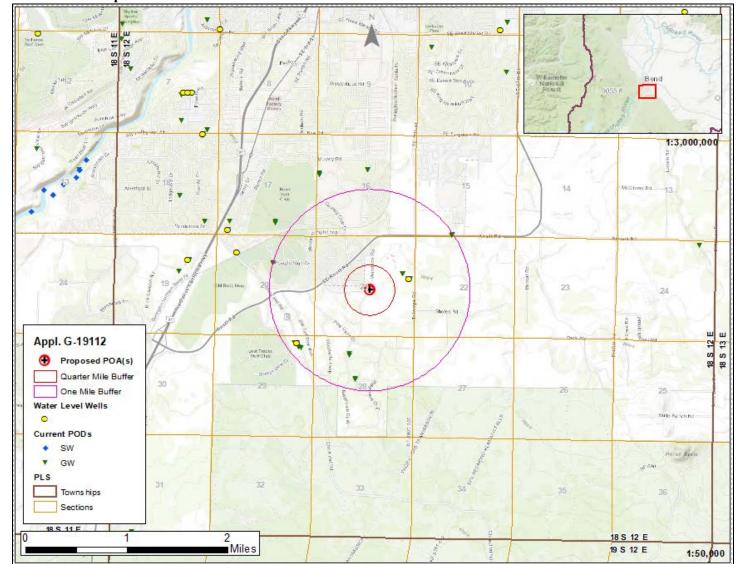
OWRD Groundwater Information System Database, Accessed 11/29/2021 [https://apps.wrd.state.or.us/apps/gw/gw info/gw info report/gw search.aspx]

Sherrod, D. R., Taylor, E. M., Ferns, M. L., Scott, W. E., Conrey, R. M., and G. A. Smith. 2004. Geologic Map of the Bend 30- X 60-Minute Quadrangle, Central Orgon. USGS Geologic Investigations Series Map I-2683

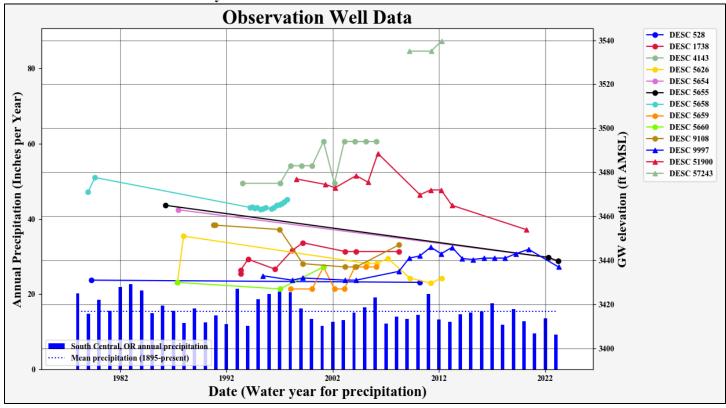
D. WELL CONSTRUCTION, OAR 690-200

D 1.	Well #:	Logid:						
D2.	THE WELL does not appear to meet current well construction standards based upon:							
	a. \square review of the	well log;						
	b. field inspect	on by						
	c. \square report of CW	RE						
		y)						
D3.		ction deficiency or other comment is described as follows:						
	-							
D4. [Route to the Well C	onstruction and Compliance Section for a review of existing	ng well construction.					

Well Location Map



Water-Level Measurements in Nearby Wells



Well Log Statistics from Nearby Wells

