PUBLIC INTEREST REVIEW FOR GROUND WATER APPLICATIONS

TO:		r Rights S	ection		DateJune 5, 2006									
FROM	:	Grou	nd Water/	Hydrology	Section_			Zwart						
SUBJE	ECT:	Appl	ication G-	16621				's Name sedes re	view of		N/A	Date of Re	view(s)	
OAR 69 welfare, to deter	90-310-1 , <i>safety a</i> mine who	30 (1) nd heal ether th	The Depart th as descri e presumpti	<i>ibed in ORS</i> on is establ	resume the 537.525. Ished. OAl	<i>at a propos</i> Departmen R 690-310-	ed g t stai 140	ff review allows th	ater use will ground wate he proposed agency poli	er apj use b	olications u e modified	inder OA or condi	R 690-31 tioned to	0-140 meet
A. <u>GE</u>l A1.			ORMATI(eek(s) <u>0.3.</u>	_					Laurie Wil Deschutes		S Co	unty: <u>W</u>	asco	Basin,
A2. A3.	Propose Well an	ed use: . id aquif	Irri er data (att	gation, 60 ach and nu	acres (P) mber logs	subb Seas	sona	lity:	ad Map: <u>W</u> <u>April 1 to</u> rk proposed	Octo	ber 31		gid):	
Well	Log	id	Applicant Well #		oposed quifer*	Propos Rate(ci			Location /R-S QQ-Q)			i, metes a		
1 2 3	Propo	sed	1		CRB	0.334			5E-27 SE-N	E		I, 1125' W		
5	um, CRB,	Dadrosi).1		_		-				
Well	Well Elev ft msl	First Wate ft bls	SWL	SWL Date	Well Depth (ft)	Seal Interval (ft) 220±	In	Casing ntervals (ft)	Liner Intervals (ft) None		rforations r Screens (ft)	Well Yield (gpm) 150±	Draw Down (ft)	Test Type
Use data	• • •		for proposed		nation fron	n remarks	sect	ion of a	pplication.					
A5. 🛛	manage (Not all	ment o	ules contai	iter hydrauli n such prov	ically conn isions.)	ected to sur	rface	water [lles relative t ☐ are, or 🗵	o the	developme not, activa	ent, classi	ification a	ınd/or ıtion.
A6. 🗌	Well(s) Name o	f admir	, istrative ar	ea:		,		, taj	p(s) an aquif	er lin	nited by an	administ	rative res	triction.

Version: 08/15/2003

GRO	DUN	D WATER AVAILABILITY CONSIDERATIONS, OAR 690-310-130, 400)-010, 410-007 <u>0</u>									
•	Bas	ed upon available data, I have determined that ground water* for the proposed use:										
	a.	is over appropriated, is not over appropriated, or is cannot be determined to be over appropriated during any period of the proposed use. * This finding is limited to the ground water portion of the over-appropriation determination as prescribed in OAR 690-310-130;										
	Ь.	$\ \ \ \ \ \ \ \ \ \ \ \ \ $										
	c.	will not or will likely to be available within the capacity of the ground water re	esource; or									
	d.	will, if properly conditioned, avoid injury to existing ground water rights or to the i. The permit should contain condition #(s) 7C 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 ground water production from no deeper than	ft. below land surface;									
	b.	Condition to allow ground water production from no shallower than	ft. below land surface;									
	c.	Condition to allow ground water production only from the water reservoir between approximately ft. and ft. below is	ground and surface;									
	d.	water 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 Ground Water 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):										
			-									
	ever If n	und water availability remarks: Potential for water-level declines and overdraft twhere the Columbia River Basalt aquifers are developed, especially in Eastern Or measurement/decline condition is used, as recommended above, then I would need by result being that one or both of the boxes 'will not likely be available' being ch	regon where recharge is small. I to re-review the file, with the									
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			2012 Part - 10 (10 10 10 10 10 10 10 10 10 10 10 10 10 1									
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C. GROUND WATER/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 of the Columbia River Basalt Group		

Basis for aquifer confinement evaluation: <u>Basalt aquifers in this area are typically confined.</u> SWLs in nearby basalt wells are well above the depth that ground water was first encountered.

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 msi	Distance (ft)	Hydraulically Connected? YES NO ASSUMED	Potential for Subst. Interfer. Assumed? YES NO
1	1	Deschutes River	300*	160	2700		
1	2	Columbia River	300*	160	2200		
			1				

Basis for aquifer hydraulic connection evaluation: *Estimated. It is generally accepted that the Columbia River is a discharge area for local basalt aquifers; given the proposed depth of the well and likely head relationship, hydraulic connection with the nearby reaches appears likely.

Water Availability Basin the well(s) are located within: No WAB in this area; see Dwight memo re: Columbia mainstem.

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 source. Limit evaluation to instream rights and minimum stream flows that are pertinent to that surface water source, and 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.

Wel	SW #	Well < 1/4 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									
1	2									
									-	

Date	lune	5	2006
Date:	June	5.	2006

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:				-360.000				

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-Distr													
Well S	W#	Jan	Feb	Mar	Арг	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
		%	%	%	%	%	%	%	%	%	%	%	9/0
Well Q as C	CFS												
Interference	CFS												
Distribute	al Wall	-											
	su wen: SW#	S Jan	Feb	Маг	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
******	<u> </u>	%	%	0/0	% %	1VIU.y	%	%	Aug %	%	%	140V	%
Well Q as C	CES			-3.2	7.0					- '-			
Interference													
		%	%	9/0	0/0	%	%	1/0	%	%	%	%	%
Well Q as C	CES												
Interference													
		%	%	9/0	%	%	%	%	9/0	9/0	%	u/a	%
Well Q as C	CFS												
Interference													
		9/6	%	º/u	°/o	%	%	%	9/0	9/0	%	9/0	%
Well Q as C	CFS												
Interference										Ì			
		%	º/o	%	0/6	%	%	%	%	%	%	%	%
Well Q as C													
Interference	: CFS												
		%	%	%	%	%	⁰ / ₀	%	9/0	%	%	%	%
Well Q as C													
Interference	CFS										1		
(A) = Total l	Interf.												
(B) = 80 % N	Vat. Q												
(C) = 1 % N	at. Q												
(D) = (A) >	(C)	V	V	1	V	√	1	1	1	V	/	1	1
$\frac{(B) - (A / B)}{(E) = (A / B)}$	_	9/0	8/0	9/0	%	e/o	%	%	9/0	%	%	%	9/4
(E) = (A1 B)		CDC	(D) - 177.4		1 . 1			ODC (C)					

(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.

continued continued	Date: June 5, 2006
Basis for impact evaluation:	i
	- "
o. 690-09-040 (5) (b) The potential to impair or detrimentally aff Rights Section.	Tect the public interest is to be determined by the Wa
 ✓ If properly conditioned, the surface water source(s) can be adequated under this permit can be regulated if it is found to substantially interest. i. ☐ The permit should contain condition #(s) 7J 	ntely protected from interference, and/or ground water us rfere with surface water:
ii. The permit should contain special condition(s) as indic	ated in "Remarks" helow
ii. The permit should comain special condition(s) as male	ated in Remarks below,
The Scenic Waterway condition is therefore recommended, based o	n the 1033 guidance document.
<u> </u>	
- Total Ref. 1.1 (YVR-10) (VR-20)	
	<u> </u>
References Used: Local well logs; local knowledge; reviews of near	arby files; Ground-Water Resources of the Hood Bas
USGS WRI 81-1108, by Grady, 1983.	

01.	Well #: Logid:	
D2.	THE WELL does not meet current well construction standar review of the well log; field inspection by report of CWRE other: (specify)	
D3.	THE WELL construction deficiency: constitutes a health threat under Division 200 rules; commingles water from more than one ground water res permits the loss of artesian head; permits the de-watering of one or more ground water res other: (specify)	ervoirs;
D4.	THE WELL construction deficiency is described as follows:	
D5.	THE WELL a. was, or was not constructed according original construction or most recent in	
	b. I don't know if it met standards at th	e time of construction.
D6. [Route to the Enforcement Section. I recommend withholding s filed with the Department and approved by the Enforcement Section.	
THIS	ECTION TO BE COMPLETED BY ENFORCEMENT	PERSONNEL
D7. [Well construction deficiency has been corrected by the following	actions:
		W.S. (1998)
		VIIIV.

		, 200
	(Enforcement Section Signature)	
	<u>-</u>	
D8. [Route to Water Rights Section (attach well reconstruction lo	gs to this page)

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WATER RESOURCES DEPARTMENT June 5, 200 6 **MEMO** TO: Application G-/662/ FROM: SUBJECT: Scenic Waterway Interference Evaluation YES The source of appropriation is within or above a Scenic Waterway Use the Scenic Waterway condition (Condition 7J) NO Per ORS 390.835, the Ground Water 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 Ground Water 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 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
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