## Water Right Conditions Tracking Slip Groundwater/Hydrology Section

FILE # # G-17624
ROUTED TO: Water Rights TOWNSHIP/ RANGE-SECTION: 55/1E-11+14

CONDITIONS ATTACHED?: [1/yes [ ] no

REMARKS OR FURTHER INSTRUCTIONS:
Proposed rate is 150 gpm per
Jerry Santer (see LL-1444).

Reviewer: Mike Zwant

## WATER RESOURCES DEPARTMENT

ME	OM							$\mathcal{M}$	ay 1	<u>6</u>	2063
TO: FRO SUB	M: JECT:	GW:	M.h.	e Z	7624 wart Name) nterfere		aluatio	n			
	_YES _NO	The s	ource of	f approp	oriation	is withi	n or abo	ve a Sc	enic Wa	aterway	
YES  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										
Calcula calcula informi Exerci Watery	RIBUTI  Ite the per  ted, per c  ing Water  se of the  way by	ON OF recentage riteria in Rights the follow	INTER of consum 390.835, and the De	FEREN  pptive use do not fi  partment  culated t	ICE  by mont  ll in the to  is unable	ving cha  th and-fill able but of the to make e month ed as a j	in the tall heck the a Prepor	of a sce	nic wat If interfe option a of Eviden	erway. erence ca bove, thu	s g. Scenic
			low is re		T	T1	A:	0	0-1	Mari	Dea
an	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec

## PUBLIC INTEREST REVIEW FOR GROUND WATER APPLICATIONS

TO:	Water Rights Section						Date May 16, 2013						
FROM	[:	Grou	nd Water	Hydrology	Section		ael Zwart						
SUBJE	ECT:	Appl	ication G-	17624			iewer's Name ipersedes re	eview of		Date of Re	eview(s)		
OAR 6 welfare to deter the pres	90-310-1 , safety a mine who sumption  NERAL  Applica	and head ether the criterian INFO	The Depard th as descree presumpt This revi DRMATION	ibed in ORS ion is establ ew is based ON: A	presume the 1537.525. ished. OA upon ava pplicant's m two	at a propose Departmen R 690-310- ilable infor Name: well	sed groundw t staff review 140 allows a rmation and Willamet (s) in the	w ground wat the proposed d agency pol te Egg Farr	ensure the prese er applications use be modified icies in place at	ervation of under OA or condit the time	of the pull R 690-31 itioned to e of evalu	neet nation.	
4.2							`	. —					
A2. A3.	Well ar	ed use: . id aquif	er data (att	ach and nu	<u>icultural</u> mber logs	Seas for existin	sonality: i <b>g wells; m</b> a	Year roun	d   wells as such	under log	 gid):		
Well	Logid Applicant's Well #		t's Pro	Proposed Aquifer*		ed	Location /R-S QQ-Q)	Location	Location, metes and bounds, e.g. 2250' N, 1200' E fr NW cor S 36				
1 2	CLAC 2457 Proposed		1 All		uvium uvium	0.334	2 5S/1	E-14 NW-N		1170' E fr NW cor S 14			
3	Fropo	<u>seu</u>		All	uvium	0.334	2 55/1	5S/1E-11 NW-SW		1650' N, 1080' E fr SW cor S 11			
4													
* Alluvii	ım, CRB,	Bedrocl										_	
Well	Well Elev ft msl	First Water ft bls	r ft bls	SWL Date	Well Depth (ft)	Seal Interval (ft)	Casing Intervals (ft)	Liner Intervals (ft)	Perforations Or Screens (ft)	Well Yield (gpm)	Draw Down (ft)	Test Type	
2	268 256	102	67	06/21/77	304	0-37 0-35±	0-289 0-150±	None	102-06/125-29 100+	67	7	В	
						0000	0 1502		100				
		_											
Use data	from app	lication	for proposed	wells.									
	R-1559, v tion LL-	which a 1444.	nuthorizes	a well that	develops t	he same a	guifer (CLA	AC 2468). T	. The applicat	is identic	cal to		
A5. 🖾	manage (Not all	ment of basin r	ules contai	nter hydrauli n such provi	cally conn sions.)	ected to sur	rface water	ules relative t □ are, or ⊠	o the developm  ] are not, active	ent, class ated by th	ification a	and/or ation.	
A6. 🗌	Name o	f admir	nistrative ar	ea:	_				er limited by an		_		

Version: 08/15/2003

В. <u>GR</u>	<u>ROUN</u>	ND WATER AVAILABILITY CONSIDERATIONS, OAR 690-310-130, 400-0	10, 410-0070									
В1.	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;										
	b.	■ will not or ■ will likely be available in the amounts requested without injury to prior water rights. * This finding is limited to the ground water 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 ground water resor	urce; or									
	d.	will, if properly conditioned, avoid injury to existing ground water rights or to the gr i.  The permit should contain condition #(s) 7C, 7T  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;	round water resource:									
B2.	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 land	ground surface;									
	d.	<ul> <li>■ Well reconstruction is necessary to accomplish one or more of the above conditions. occur with this use and without reconstructing are cited below. Without reconstruction issuance of the permit until evidence of well reconstruction is filed with the Departmer Water Section.</li> <li>■ Describe injury —as related to water availability—that is likely to occur without well reconstruction water rights, not within the capacity of the resource, etc):</li> </ul>	a, I recommend withholding at and approved by the Ground construction (interference w/									
В3.	Gro	ound water availability remarks: <u>Nearby State Observation Wells are displaying rea</u>	sonably stable water levels.									

Date: May 16, 2013\_

\_\_\_\_\_continued

Application G-17624

## 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
1,2	Alluvium	$\boxtimes$	

Basis for aquifer confinement evaluation: <u>Groundwater in the area is confined by the saturated, fine-grained deposits</u> found at the surface, and by the thick intervening clay beds that contain the more productive sand and gravel lenses.

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 to Subst. Inter Assumed YES	rfer.
1	1	Kaiser Creek	201	165	4000			$\boxtimes$
2	1	Kaiser Creek	200±	165	5600			
1	2	Bear Creek	201	225	6900			$\square$
2	2	Bear Creek	200±	210	5500			$\boxtimes$

Basis for aquifer hydraulic connection evaluation: Heads in the alluvial aquifer are generally above the elevation of nearby surface water sources, so it is likely that groundwater in the alluvium is discharging to nearby streams. Bear Creek also drops below 200 feet within a short distance downstream. Water table maps in the area (Woodward and others, 1998) also indicate that ground water in the alluvial aquifer is discharging to surface water sources in the area.

Water Availability Basin the well(s) are located within: Pudding R > Molalla R ab Mill Cr (151).

C3a. 690-09-040 (4): Evaluation of stream impacts for <u>each well</u> 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  $\boxtimes$  box indicates the well is assumed to have the potential to cause PSI.

Well	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			Pudding	36.0		67.3_		<25%	

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?
					_		_	
					_			

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.

	stributed						_						_
Well	SW#	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
		%	%	%	%	%	%	%	<u>%</u>	%	%	%	%
Well Q a	s CFS												
Interfere	nce CFS												
D:-4-:'b-	uted Well		_										
Well	SW#	s Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
11 011	511	%	<u> </u>	%	/ tpi	%	%	%	%	<u>эср</u> %	%	%	<u> </u>
Well Q a	s CFS				.,					- 1			
Interfere													
		%	%	%	%	%	%	%	%	%	%	%	%
Well Q a	s CFS												
Interfere													
		%	%	%	%	%	%	%	%	%	%	%	%
Well Q a	s CFS												
Interfere													
		%	%	%	%	%	%	%	%	%	%	%	%
Well Q a	s CFS												
Interfere	nce CFS												
		%	%	%	%	%	%	%	%	%	%	%	%
Well Q a	s CFS												
Interfere	nce CFS												
		%	%	%	%	%	%	%	%	%	%	%	%
Well Q a	_												
Interfere	nce CFS												
(A) = Tot	al Interf			_									
$(B) = 80^{\circ}$					_								
(C) = 1 %													
(2) - 1 /	V.184 Q												
$(\mathbf{D}) = (\mathbf{A})$	> (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.

	Date: May 16, 2013
Basis for impact evaluation:	
690-09-040 (5) (b) The potential to impair or detrimen Rights Section.	tally affect the public interest is to be determined by the V
If properly conditioned, the surface water source(s) can be under this permit can be regulated if it is found to substantia i. The permit should contain condition #(s)	ally interfere with surface water:
ii. The permit should contain special condition(s)	as indicated in "Remarks" below;
SW / GW Remarks and Conditions	
References Used: Gannett, Marshall W., and Caldwell, Ro	odney R., 1998, Geologic Framework of the Willamette
References Used: <u>Gannett, Marshall W., and Caldwell, Ro</u> Lowland Aquifer System, Oregon and Washington: U. S. G	
Lowland Aquifer System, Oregon and Washington: U. S. G	eological Survey Professional Paper 1424-A, 32p, 8 plates.
Lowland Aquifer System, Oregon and Washington: U. S. G. Conlon and others, 2005, Ground-water hydrology of the W	eological Survey Professional Paper 1424-A, 32p, 8 plates.
Lowland Aquifer System, Oregon and Washington: U. S. G. Conlon and others, 2005, Ground-water hydrology of the W. nvestigations Report 2005-5168.	eological Survey Professional Paper 1424-A, 32p, 8 plates. illamette Basin, Oregon: U.S Geological Survey Scientific
Lowland Aquifer System, Oregon and Washington: U. S. G. Conlon and others, 2005, Ground-water hydrology of the W. nvestigations Report 2005-5168.  Woodward and others, 1998, Hydrogeologic framework of the Moodward and the Moodward	illamette Basin, Oregon: U.S Geological Survey Scientific  he Willamette lowland aquifer system, Oregon and
Lowland Aquifer System, Oregon and Washington: U. S. G. Conlon and others, 2005, Ground-water hydrology of the W. nvestigations Report 2005-5168.	illamette Basin, Oregon: U.S Geological Survey Scientific  he Willamette lowland aquifer system, Oregon and
Lowland Aquifer System, Oregon and Washington: U. S. G. Conlon and others, 2005, Ground-water hydrology of the W. nvestigations Report 2005-5168.  Woodward and others, 1998, Hydrogeologic framework of the Moodward and the Moodward	illamette Basin, Oregon: U.S Geological Survey Scientific  he Willamette lowland aquifer system, Oregon and

App	lication G- <u>17624</u>	continued		Date: May 16, 2013	
D. <u>V</u>	WELL CONSTRUC	TION, OAR 690-200			
D1.	Well #:1	Log	gid: <u>CLAC 2457</u>		
D2.	a. review of b. field insp	ection by CWRE ecify)		sed upon:	;
D3.	a. constitute b. comming c. permits tl d. permits tl	estruction deficiency: es a health threat under Divides water from more than one loss of artesian head; the de-watering of one or more decify)	ne ground water reservoit ore ground water reservoi	rs;	
D4.		· · · · · · · · · · · · · · · · · · ·			
D5.		a. was, or was n	not constructed according tion or most recent modif	to the standards in effect at the time of ication.	
D6.				nce of the permit until evidence of well recon and the Ground Water Section.	struction
TH	IS SECTION TO B	E COMPLETED BY E	NFORCEMENT PEI	RSONNEL	
D7.	Well construction	deficiency has been correct	ted by the following actio	ns:	
	(Enforce	ment Section Signature)			, 200
D8.	☐ Route to Water	Rights Section (attach we	ll reconstruction logs to	this page).	

