# Water Right Condittions Tracking Slip Groundwater/Hydrology Section FILE # # G-17783 ROUTED TO: Water Rights - Mary TOWNSHIP/ RANGE-SECTION: 185/46 E-13 CONDITIONS ATTACHED?: Myes [] no REMARKS OR FURTHER INSTRUCTIONS: Reviewer: Mike Zwart

# WATER RESOURCES DEPARTMENT March 25,2014 **MEMO** Application G-17783 TO: GW: Mike Zwart (Reviewer's Name) FROM: **SUBJECT: Scenic Waterway Interference Evaluation** П YES The source of appropriation is within or above a Scenic Waterway NO YES Use the Scenic Waterway condition (Condition 7J) NO Per ORS 390.835, the Groundwater Section is able to calculate ground water П 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 \_\_\_ 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:		Wate	r Rights S	ection				Dat	teM	arch 2	25, 2014		
FROM	<b>1</b> :	Grou	ndwater S	ection			Zwart						
SUBJ	ECT:	Appli	cation G-	17783		Revi Su	iewer's Nam persedes	review of			Date of Re	view(s)	
oar welfar to dete	690-310-1 e, safety a ermine who esumption	30 (1) 7 nd heal ether the criteria.	The Departs th as describe presumpt This revie	ment shall p ibed in ORS ion is establ ew is based	537.525. Dished. OAR upon avail	a propos epartment 690-310- able infor	ed ground t staff rev 140 allov rmation a	dwater use will iew ground wa vs the proposed and agency pol	ter application use be milicies in p	ations of the contract of the	under OA i or condi the time	R 690-3 itioned to e of evalu	10-140 meet uation.
Al.	A. GENERAL INFORMATION: Applicant's Name: George Rodriguez County: Malheur  Al. Applicant(s) seek(s) 3.0 cfs from one well(s) in the Malheur Basin,  subbasin Quad Map: Cairo												
A2. A3.					20.0 acres mber logs f	Seas	sonality:	March 1 mark proposed	to Octol			gid):	
Well	Logic	d	Applicant's Well # Proposed Aquifer* Proposed Location Rate(cfs) (T/R-S QQ-Q)								tion, mete 'N, 1200'		
1 2	Propos	ed	Rod. #1	A	lluvium		.0	18S/46E-13 S	750' N, 1320' E fr SW cor S 13			or S 13	
3													
5													
	ium, CRB,	Bedrock	ζ			<u></u>							
					1 377 11	6 1		T .	I D C		1 11/11		
Well	Well Elev	First Water	SWL	SWL	Well Depth	Seal Interval	Casing Interval		Perfora Or Scr		Well Yield	Draw Down	Test
<u> </u>	ft msl	ft bls	ft bls	Date	(ft)	(ft)	(ft)	(ft)	(ft)	)	(gpm)	(ft)	Type
1	2198				60-80	0-18							
Use det	o from one	liantion	for proposed	wells									
A4.					cation G-17	782.							
A5. 🗵	manage (Not all	ment of basin r	ground waules contain	ater hydraul n such prov	ically conne isions.)	cted to su	rface wate	rules relative ter are, or [	are no	t, activ	ent, class ated by th	ification	and/or cation.
A6. [	Name o	f admin	istrative ar	ea:				tap(s) an aquif					striction.

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# B. GROUND WATER AVAILABILITY CONSIDERATIONS, OAR 690-310-130, 400-010, 410-0070

	ed upon available data, I have determined that ground water* for the proposed use:		
a.	is over appropriated, ☐ is not over appropriated, or ☒ cannot be determined to be period of the proposed use. * This finding is limited to the ground water portion of the determination as prescribed in OAR 690-310-130;	e over appropriat he over-appropri	ed during any ation
b.	will not or will likely be available in the amounts requested without injury to pricis limited to the ground water portion of the injury determination as prescribed in OA		This finding
c.	will not or will likely to be available within the capacity of the ground water res	ource; or	
d.	will, if properly conditioned, avoid injury to existing ground water rights or to the game i. The permit should contain condition #(s) 7N  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;		ource:
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 lan	d surface;	ground
d.	Well reconstruction is necessary to accomplish one or more of the above conditions to 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 Department Ground Water Section.	ction, I recommen	nd withholdin
	Describe injury —as related to water availability—that is likely to occur without well resenior water rights, not within the capacity of the resource, etc):		
	ound water availability remarks: <u>Nearby State Observation Well MALH 1236 is disp</u> els and decadal scale climatic fluctuations may be superimposed on the seasonal trend		z stable wat
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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	Quaternary sand and gravel		$\boxtimes$

Basis for aquifer confinement evaluation:	This aquifer is typically unconfined to poorly confined, as described in
Groundwater Report #34.	

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)	YES	Iydrauli Connec NO A	cally ted? SSUMED	Potential for Subst. Interfer. Assumed? YES NO		
1	1	Malheur River	2180±	2158	11000	$\boxtimes$				$\boxtimes$	

Basis for aquifer hydraulic connection evaluation:	Groundwater	Report #34	documents	relatively	efficient	<u>hydraulic</u>
connection with the shallow alluvial aquifer.						

Water	A voilability	Rocin the well(s) or	ea located within	Malhour D > Sno	ke R at mouth (31011701).
water	avanability	Basin the Well(s) ar	re iocated within:	Maineur K > 5na	ke k at mouth (31011/01).

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.

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?
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								<del>                                     </del>		

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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 #		w > 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?	
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		 <u> </u>	<del>  </del>				4		<u> </u>	H-	<del> </del>	┝╼╌	┽—
-		 	<del>  </del> -				=	<u> </u>		H		<del>                                     </del>	
				1	<u> </u>								

Comments	This section does not apply.	

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-D	istributed	Wells								-			
Well	SW#	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
		%	%	%	%	%	%	%	%	%	%	%	%
Well Q	as CFS												
Interfer	ence CFS												
	4 3 337 11	- 1980					XXXX 244						
Well	outed Well SW#	s Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
WCII	3 ** #	7dii %	%	Wiai	Apr	way	% %	% %	%	%	%	%	%
Wall C	Q as CFS	%0		70	70	70	70	70	70	7/0	70	70	70
	ence CFS												
there	l l	%	%	%	%	%	%	- %	%	%	%	%	
Well (	Q as CFS	, A		70	70						~		
	ence CFS												-
	T	%	%	%	%	%	%	%	%	%	%	%	%
Well C	Q as CFS												
	ence CFS		-							711			
		%	%	%	%	%	%	%	%	%	%	%	%
Well (	as CFS												
Interfer	ence CFS												
		%	%	%	%	%	%	%	%	%	%	%	%
Well (	Q as CFS												
Interfer	ence CFS												
		%	%	%	%	%	%	%	%	%	%	%	%
Well (	Q as CFS												
Interfer	rence CFS												
(A) = T	otal Interf.						of Memory					100	Co
	% Nat. Q												700
	% Nat. Q		*			-							
			√ Sec. 1.2	#####################################	<b>√</b>	<b>√</b>	/	<b>√</b>	/	√ × × × × × × × × × × × × × × × × × × ×	8742130		1
	(A) > (C)								%	%		%	%
(E) = (A	/B) x 100	%	%	%	%	%	%	%	%	70	%	76	70

Basis for impact eva	kmark for each month where (A) is greater than (C); (E) = total interference divided by 80% flow as percentage. Ituation: This section applies, but based on past local experience with the Hunt/Wozniak model will cause much less than one percent interference with natural flows of the Malheur River.
	The country is a second in the person of the real results of the r
690-09-040 (5) (b) Rights Section.	The potential to impair or detrimentally affect the public interest is to be determined by the W
under this permit ca	ioned, the surface water source(s) can be adequately protected from interference, and/or ground water an be regulated if it is found to substantially interfere with surface water: rmit should contain condition #(s)
ii. The pe	rmit should contain condition #(s) rmit should contain special condition(s) as indicated in "Remarks" below;
References Used: Loca	al well logs; local application reviews; Ground Water Report #34 by Marshall Gannett.
References Used: Loca	al well logs; local application reviews; Ground Water Report #34 by Marshall Gannett.
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## D. WELL CONSTRUCTION, OAR 690-200

D1.	Well #:	Logid:				
D2.	a. review b. field ir c. report	oes not appear to meet current well construction standards based upon: of the well log; aspection by of CWRE (specify)				
D3.	THE WELL co	onstruction deficiency or other comment is described as follows:				
D4. [	Route to the V	Well Construction and Compliance Section for a review of existing well construction	on.			
Water Availability Tables						

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