Water Right Conditions Tracking Slip

Groundwater/Hydrology Section

		•	201	
FILE ##	G-	1750	9	
ROUTED	TO: W	ater Ri	ghts	- Jeana
TOWNSHIP RANGE-SE	CTION-	165/4	76	- 4-1
KANOL SE	CTION.	103/1	<u> </u>	346
			1	

CONDITIONS ATTACHED?	Myes []no
REMARKS OR FURTHER	INSTRUCTIONS:

Reviewer: Mike Zwart

WATER RESOURCES DEPARTMENT

MEM	0							Deci	ember	22,2	200_/
TO: FROM SUBJ		GW:	Mike Mike (Re	Z viewer's N	vort (ame)	— — ice Eva	luation				
	_YES _NO	The so	urce of	appropi	riation is	s within	or abov	re a Sce	nic Wat	erway	
V	_YES	Use the	e Scenic	water	way con	dition (Conditio	on 7J)			
	Per OF interfe the Detthat the	rence wated interest of the second se	ith surfarferences 835, the ith surfarent is ur osed us	ace wate is district of the control	er that continued by the continued by th	Section ontribut below. Section ontribut at therebly reduing cha	is unal es to a s e is a pr uce the	Scenic V ble to ca scenic w reponde surface	Vaterwa deulate vaterway erance (ewater	ground y; there of evide flows	water fore,
Calcula calculai informii Exerci	te the per ted, per c ng Water se of thi	rcentage or riteria in Rights th	390.835, at the De t is calc	nptive use do not fil partment ulated t	by montal in the to is unable	h and fill able but co to make	heck the a Prepon ly flows	"unable" derance o s in	option at of Eviden	bove, thus	s g. Scenic
which	surface	water f	low is re	educed.		ed as a p				_	
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec

PUBLIC INTEREST REVIEW FOR GROUND WATER APPLICATIONS

	Wate	r Rights S	Section				Dat	e <u>Decemb</u>	er 22, 20	011	
	Grou	nd Water/	Hydrology	Section_							
ECT:	Appli	ication G-	17509				view of		Date of Re	view(s)	
90-310-1 , safety a mine who numption NERAL	30 (1) and heal ether the criteria	The Deparath as describe presumpt. This revi	tment shall pribed in ORS ion is estable ew is based	oresume the 5 537.525. It ished. OAI upon avai	at a propos Departmen R 690-310- ilable infor Name:	red groundw t staff review 140 allows t rmation and Christoph	v ground wat he proposed l agency pol	er applications use be modified icies in place a	ervation of under OA d or condi t the time County:	of the put R 690-3 tioned to of evalu	neet ation.
-											_ Basin,
Propose	ed use:	Irr	igation, 8.4	acres	Seas	sonality:	March 1 t	o October 31	under log	gid):	
Log	Well #					1					
		3									
MALH	216	4	Terti	ary Seds.	0.804			W 1525'	1525' S, 170' E fr NW cor S 5		
			_								
on n											
ım, CRB,	Bedrock										
Well Elev ft msl		SWL 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
2595	125	124	5/11/10	815	0-18	0-317	None	304-728	1140	181	P
2580	90	/0	5/11/10	290	0-18	0-180	None	None	450	120	P
from app	lication 1	for proposed	i wells.								
Comme	ents: <u>*T</u> antity, s	he rate resuch as 1/6	equested is v 60 cfs/acre,	well over the which is so	he customa ometimes r	ary rate. Is	suggest that applicants	the rate be lim to properly op	erate circ	more cle pivot	S
manage (Not all	ment of basin r	ground wa	ater hydrauli n such provi	cally conne	ected to sur	face water	are, or 🗵	are not, activ	ated by th	is applic	ation.
Name o	f admin	istrative ar	ea:								triction.
	Propose Well am Provisi manage (Not all Comme	IC INTEREST 90-310-130 (1) 2 safety and head mine whether the sumption criteria NERAL INFO Applicant(s) se Willow Proposed use: Well and aquiful Logid MALH 223 MALH 216 MALH 216 Well First Elev Water ft msl ft bls 2595 125 2580 90 Provisions of management of (Not all basin re Comments: *Triate quantity, see Well(s) #_Name of admin	CT: Application G- IC INTEREST PRESU 90-310-130 (1) The Depart, safety and health as descrimine whether the presumption criteria. This revi NERAL INFORMATION Applicant(s) seek(s) 2.0 Willow Creek Proposed use: Irr Well and aquifer data (att Logid Applican Well # MALH 223 3 MALH 216 4 Image: Water fit bls fit bls fit bls 2595 125 124 2580 90 70 Provisions of the Malhe management of ground was (Not all basin rules contain Comments: *The rate regrate quantity, such as 1/6 Provisions of administrative and Comments:	IC INTEREST PRESUMPTION 90-310-130 (1) The Department shall processed in ORS mine whether the presumption is establishment of criteria. This review is based in ORS mine whether the presumption is establishment of criteria. This review is based in ORS mine whether the presumption is establishment of criteria. This review is based in ORS mine whether the presumption is establishment of safety and health as described in ORS mine whether the presumption is establishment of safety in ORS mine whether the presumption is establishment of the NERAL INFORMATION: Applicant(s) seek(s)2.02* cfs frow like with a constant of the constant	Ground Water/Hydrology Section GCT: Application G- 17509 IC INTEREST PRESUMPTION; GROUN 90-310-130 (1) The Department shall presume the safety and health as described in ORS 537.525. mine whether the presumption is established. OAF sumption criteria. This review is based upon available of the proposed upon available of the work	Ground Water/Hydrology Section Mich Rev SCT: Application G	Ground Water/Hydrology Section Michael Zwart Reviewer's Name Supersedes re ICINTEREST PRESUMPTION; GROUNDWATER 90-310-130 (1) The Department shall presume that a proposed groundw safety and health as described in ORS 537.525. Department staff review mine whether the presumption is established. OAR 690-310-140 allows to sumption criteria. This review is based upon available information and NERAL INFORMATION: Applicant's Name: Christoph Applicant(s) seek(s) 2.02* cfs from two well(s) in the Willow Creek subbasin Qu Proposed use: Irrigation, 8.4 acres Seasonality: Well and aquifer data (attach and number logs for existing wells; ma Logid Applicant's Proposed Well Rate(cfs) (T MALH 223 3 Tertiary Seds. 1.2143 165/4 MALH 216 4 Tertiary Seds. 1.2143 165/4 Jam, CRB, Bedrock Well First SWL SWL Well Seal Casing Intervals Intervals (ft) (ft) (ft) Elev Water ft bls Date (ft) (ft) (ft) Elev Water ft bls Date (ft) (ft) (ft) From application for proposed wells. Comments: *The rate requested is well over the customary rate. Is riate quantity, such as 1/60 cfs/acre, which is sometimes requested by Provisions of the Malheur Basin ru management of ground water hydraulically connected to surface water (Not all basin rules contain such provisions.) Comments: *The rate requested is well over the customary rate. Is riate quantity, such as 1/60 cfs/acre, which is sometimes requested by Provisions of the Malheur Basin rules contain such provisions.)	Ground Water/Hydrology Section Michael Zwart Reviewer's Name Supersedes review of supersedes will over the customary rate. I suggest that riate quantity, such as 1/60 cfs/acre, which is sometimes requested by applicants Provisions of the Malheur Supersedes review of Supersedes rev	Ground Water/Hydrology Section Michael Zwart Reviewer's Name Supersedes review of Supersedes	Ground Water/Hydrology Section Michael Zwart Reviewer's Name Supersedes review of Date of Re	Ground Water/Hydrology Section Michael Zwart Reviewer's Name Supersedes review of Date of Review(s)

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<u>lou</u>	ND WATER AVAILABILITY CONSIDERATIONS, OAR 690-310-130, 400-010, 410-0070
Ba	nsed 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 over appropriated during a 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 resource; or
d.	will, if properly conditioned, avoid injury to existing ground water rights or to the ground water resource: 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 ground water 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 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 Grow Water Section. Describe injury —as related to water availability—that is likely to occur without well reconstruction (interference we introduced in the problems that are likely occur without reconstruction).
	senior water rights, not within the capacity of the resource, etc):
all Fe	round water availability remarks: <u>The nearby observation wells (MALH 220 and 122) penetrate an overlying</u> uvial aquifer, so they are not especially useful to evaluate groundwater availability for the deeper aquifer (Glennerry Formation) penetrated at these wells. It appears that there is limited but increasing local development of the eper aquifer for irrigation.
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Date: December 22, 2011

Application G-17509

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Annlination	C 17500
Application	G-1/309

continued

Date: December 22, 2011

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	Likely the Glenns Ferry Fm. or equiv. (Tig in GW Rpt. 34)	\boxtimes	

Basis for aquifer confinement evaluation: The water-bearing zones in the Glenns Ferry Formation are relatively deep relative to the static water level.

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 1/4 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 for Subst. Interfer. Assumed? YES NO
1	1	Willow Creek	2470	2526	3150		
2	1	Willow Creek	2490	2524	2550		
1	2	Gum Creek	2470	2670	3100		
2	2	Gum Creek	2490	2660	3400		

Basis for aquifer hydraulic connection evaluation: The aquifer developed likely discharges to the overlying or adjacent alluvial deposits and therefore is in indirect and inefficient hydraulic connection with the nearest reaches of the creeks.

Water Availability Basin the well(s) are located within: Willow Cr > Malheur R ab Gum Cr (31011910).

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?
							100			

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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 #	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.	
				4 124	property of			
				Mary of the	nd hankning	and Edward	a of the	
						Providence La	0.1.	

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.

Well	istributed SW#	Jan	Feb	Mar	Apr	May	Jun	Jul	Ana	Son	Oat	Nov	Dag
WCII	JWH	%	%	%	Api %	%	%	% Jui	Aug %	Sep %	Oct	Nov %	Dec %
Well Q	oc CES	/0	70	70	/0	/0	70	70	70	70	70	70	70
	ence CFS									-			
mener	chec Cr 5				. 14.7		1100				1 0		
Distrib	outed We	lls											
Well	SW#	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
		%	%	%	%	%	%	%	%	%	%	%	%
Well Q	as CFS		:/:							7			
Interfere	ence CFS								-				
		%	%	%	%	%	%	%	%	%	%	%	%
Well Q	as CFS					100	- 7	.1	-	74W			
Interfere	ence CFS									C STORY			
		%	%	%	%	%	%	%	%	%	%	%	%
Well Q	as CFS												
Interfere	ence CFS			L			1.00		77 . 177				
	4	%	%	%	%	%	%	%	%	%	%	%	%
Well Q							76.		· Print	100			
Interfere	ence CFS					ckr	1 Ty. Hit.	. 9	0, 3	Marin .			
		%	%	%	%	%	%	%	%	%	%	%	9/6
Well Q					7 1-		=		ringson in	5 7			
Interfere	ence CFS	1				*				1.2			
		%	%	%	%	%	%	%	%	%	%	%	%
Well Q			_					×	4				
Interfere	ence CFS					^				4			
$(A) = T_0$	tal Interf.												
(B) = 80	% Nat. Q												
(C) = 1	% Nat. Q												
(D) = (A	(C)	V	. 1	1	1	1	1	V	V	✓	. 🗸	1	_
	/B) x 100	%	%	%	%	%	%	%	%	%	%	%	%
. 1													

(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.

Applic	eation G-17509 continued	Date: December 22, 2011
	Basis for impact evaluation:	
4b.	690-09-040 (5) (b) The potential to impair or detrimen Rights Section.	tally affect the public interest is to be determined by the Wa
5. [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) ii. The permit should contain special condition(s)	•
	ii. The permit should contain special condition(s)	as indicated in "Remarks" below;
5. S \	W / GW Remarks and Conditions	
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	eferences Used: Ground Water Report #34 by Marshall 17117.	Gannett; local well logs; local reviews, especially G-17510 &
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Applica	tion G-17509 continued	Date: <u>December 22, 2011</u>	
D. <u>WE</u>	LL CONSTRUCTION, OAR 690	<u>-200</u>	
D1.	Well #: 3 & 4	Logid: MALH 223 & 216	
D2.	 a. review of the well log; b. field inspection by report of CWRE 	well construction standards based upon:	
D3.	THE WELL construction deficiency: a constitutes a health threat under Division 200 rules; b commingles water from more than one ground water reservoir; c permits the loss of artesian head; d permits the de-watering of one or more ground water reservoirs; e other: (specify)		
D4.	THE WELL construction deficiency is described as follows: <u>I have no issues with the construction of these wells.</u> The shallow alluvial aquifer may not be present, so the minimum seal depth is adequate. The wells do not, in my opinion, commingle aquifers, despite the differing statics reported. They likely do not penetrate below the Glenns Ferry Formation.		
D5.		was not constructed according to the standards in effect at the time of enstruction or most recent modification.	
	b. 🛛 I don't kne	ow if it met standards at the time of construction.	
D6.		I recommend withholding issuance of the permit until evidence of well reconstruction wed by the Enforcement Section and the Ground Water Section.	
THIS	SECTION TO BE COMPLETED	BY ENFORCEMENT PERSONNEL	
D7.	Well construction deficiency has been	corrected by the following actions:	
	•		
	(Fusion A Continue Single		
	(Enforcement Section Signature)		
D8.	Route to Water Rights Section (atta	nch well reconstruction logs to this page).	

