Water Right Conditions Tracking Slip Groundwater/Hydrology Section FILE # # __ G - 17757 ROUTED TO: Water Rights - Many TOWNSHIP/ RANGE-SECTION: 185/46E-8 CONDITIONS ATTACHED?: [Yyes [] no REMARKS OR FURTHER INSTRUCTIONS: Reviewer: __ Mike Zwat

WATER RESOURCES DEPARTMENT February 21,20 14 **MEMO** Application G- 17757 TO: GW: Mike Zwart (Reviewer's Name) FROM: **SUBJECT: Scenic Waterway Interference Evaluation** \Box YES The source of appropriation is within or above a Scenic Waterway NO YES Use the Scenic Waterway condition (Condition 7J) NO П Per ORS 390.835, the Groundwater 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 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 ______ Scenic 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	er Rights S	ection				Date	e <u>Fel</u>	oruary	21, 20	14	
FROM	И:	Grou	ındwater S	ection		Mike	Zwart						
						Revi	ewer's Nam						
SUBJ	ECT:	App	lication G-	17757		Su	persedes	review of			Date of Re	view(s)	
							_				- 410 01 110		
oar welfar to dete	690-310-1 e, safety a ermine who esumption	30 (1) nd hea ether the criteria	The Depart lith as descr he presumpt a. This revi	tibed in ORS tion is establi ew is based	resume that 537.525. Do shed. OAR upon availa	a propose epartment 690-310- able infor	ed ground staff revi 140 allow mation a	dwater use will diew ground water the proposed and agency poli	er applica use be mo icies in pl	tions u odified ace at	nder OA or condi the time	R 690-3 tioned to of evalu	10-140 meet ation.
A. <u>GI</u>	ENERAL	INF	ORMATI	<u>ON</u> : A _l	oplicant's N	ame:	Kevin a	nd Kathy Cla	rich	_ c	ounty:	Malheu	<u>ır </u>
Al.	Applica	ınt(s) s	eek(s) <u>0.9</u>	28 cfs from	n <u>one</u>								_ Basin,
						subb	asin (Quad Map:M	lalheur	Butte			
A2.	Propose	ed use_	Irı	rigation, 75	acres	Seas	onality:	March 1	to Octob	er 31			
A3.	Well an	d aqui	fer data (at	tach and nu	mber logs f	or existin	g wells; i	mark proposed	wells as	such u	ınder log	gid):	
Well	Logic	d		's Propose	ed Aquifer*								
2	WINDIE	2014	•										
3													
						<u> </u>							
	ium, CRB,	Bedro	ck			1							
	1 337-11	F:	. 1		Wall	Cool	Cosina	I inon	Dorford	iona I	Wall	Drow	
Well			SWL	SWL		Interval					Yield	Down	Test
<u></u>	ft msl		S		(ft)	(ft)	(ft)	(ft)			(gpm)	(ft)	
<u> </u>	2250	55	35	03/25/2003	75	0-18	0-61	None	42-5	8	450	10.5	rump
I Venda		liantian	f	d malla									
Use dai	ta trom app	lication	i for propose	a wells.									
A4.	Commo	ents: _	This same 1	proposal wa	s the subjec	ct of Drou	ight App	lication G-1770	02				
A5.	Provis	ions of	f the <u>Malhe</u>	eur			Basin	rules relative t	o the dev	elopme	nt, class	ification	and/or
	manage	ment o	of ground w	ater hydrauli	cally conne	cted to su	rface wate	er 🔲 are, or 🛭	are not	t, activa	ated by tl	his applic	cation.
	•			•	-								
	subbasin Quad Map: Malheur Butte Proposed use												
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A0. L		# f admi	inistrative a	,, , _ rea:		,	,	tap(s) an aquin	er minned	by an	aummist	ialive res	su iction.
	A2. Proposed use Irrigation, 75 acres Seasonality: March 1 to October 31 Well and aquifer data (attach and number logs for existing wells; mark proposed wells as such under logid): Well Logid Applicant's Well Proposed Aquifer* Proposed Rate(cfs) (T/R-S QQ-Q) 2250 N, 1200 E fr NW cor S 36 1 MALH 52014 1 Alluvium 0.98 188/46E-8 SW-NW 330' N, 180' E fr W ¼ cor S 8 2 3												

Date: February 21, 2014

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

Bas	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 over appropriated during an 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.
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
٠.	Condition to allow ground water production only from the ground water reservoir between approximately ft. and ft. below land surface;
	senior water rights, not within the capacity of the resource, etc):
	ound water availability remarks: <u>Most local wells develop the same shallow alluvial aquifer. Local State</u> servation Wells developing this aquifer are displaying relatively stable water levels.
_	
_	

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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	Sand and gravel (Qal)		\boxtimes

Basis for aquifer confinement evaluation:	Groundwater Report #34 describes this shallow aquifer as unconfined to
poorly confined.	

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)		Conne	ulically ected? ASSUMED	Potentia Subst. In Assum YES	erfer.
1	1	Malheur River	2215	2180	5500	\boxtimes				\boxtimes

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

Water Availability Ba	sin the wel	l(s) are located within:	Malheur R > Snal	ke R at mouth (31011701)

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 \(\subseteq \text{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)	1)w 1% W	> R?	80% Natural Flow (cfs)	of N	Qw > 1% of 80% Natural Flow? Interference @ 30 days (%)		@ 30 days	Potential for Subst. Interfer. Assumed?		bst. er.
		-	-		Н				-					H			-		
			-	H	Н				-	_				Ш				Н	

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?	
						 			
						\vdash			

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	rence CFS												
Di-4-il	outed Well												0.0000000000000000000000000000000000000
Well	SW#	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Well	J 5 1 1 1	% %	%	%	**************************************	%	3un %	% %	Aug %	% %	%	%	BCC %
Well (Q as CFS	- 10	70	70	70	70	70	70	70	70	70	70	70
	rence CFS												
		%	%	%	%	%	%	%	%	%	%	%	%
Well (Q as CFS	~			~			~~~		- ~	~		
	rence CFS								-				
		%	%	%	%	%	%	%	%	%	%	%	%
Well (Q as CFS												
Interfer	rence CFS												
		%	%	%	%	%	%	%	%	%	%	%	%
Well (Q as CFS												
Interfer	rence CFS												
		%	%	%	%	%	%	%	%	%	%	%	%
Well (Q as CFS												
Interfer	rence CFS							1					
		%	%	%	%	%	%	%	%	%	%	%	%
	Q as CFS												
Interfer	rence CFS												
(A) = T	otal Interf.								0.5% 855 A.B.		**************************************	**************************************	ST 1088/19/00/19/00
	% Nat. Q												
(C) = 1	% Nat. Q			WHEN SHOW ST TO SEE ST		Service Contraction				DESCRIPTION OF THE	B 77 mag racaba	1000 NATION TO THE REAL PROPERTY.	
(D) =	(A) > (C)	√	1	√	√	1	√	-	V	√	✓	V	1
(E) = (A	/B) x 100	%	%	%	%	%	%	%	%	%	%	%	%

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	ll cause much less than one percent interference with natural flows of the Malheur River. Heress than one percent of natural flows for all but one month of the year.
690-09-040 (5) (b) Rights Section.	The potential to impair or detrimentally affect the public interest is to be determined by the V
under this permit car	oned, the surface water source(s) can be adequately protected from interference, and/or ground water not be regulated if it is found to substantially interfere with surface water: mit should contain condition #(s)
ii. The peri	mit should contain condition(s) as indicated in "Remarks" below;
V / GW Remarks and	l Conditions
eferences Used: <u>Loca</u>	ıl well logs; local application reviews; Ground Water Report #34 by Marshall Gannett.
eferences Used: <u>Loca</u>	l well logs; local application reviews; Ground Water Report #34 by Marshall Gannett.
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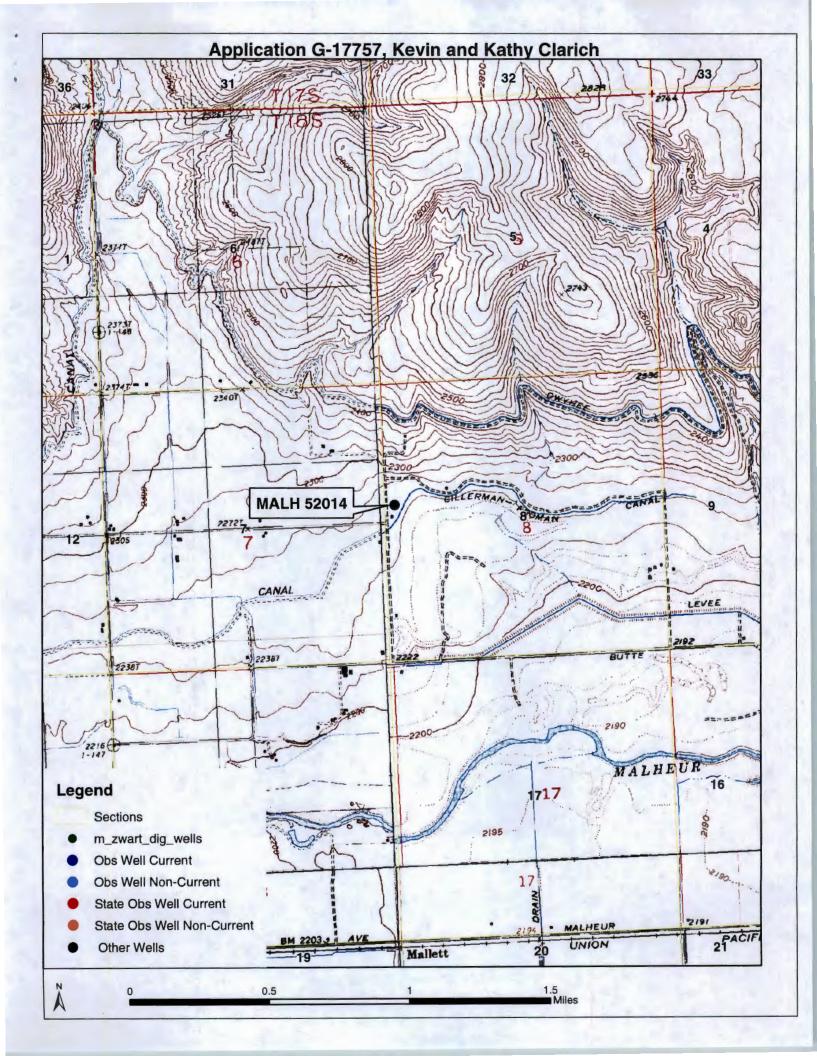
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D. WELL CONSTRUCTION, OAR 690-200

D1.	Well #:	Logid:
D2.	a.	L does not appear to meet current well construction standards based upon: view of the well log; eld inspection by port of CWRE her: (specify)
D3.	THE WEL	L construction deficiency or other comment is described as follows:
D4. [Route to th	he Well Construction and Compliance Section for a review of existing well construction.
Water	Availability '	Tables

Version: 07/26/2013



MEMO

To:

Kristopher Byrd, Well Construction and Compliance Section Manager

From:

Joel Jeffery, Well Construction Program Coordinator

Subject:

Review of Water Right Application G-17757

Date:

August 21, 2014

The attached application was forwarded to the Well Construction and Compliance Section by Water Rights. Mike Zwart reviewed the application. Please see Mike's Groundwater Review and the Well Logs.

Applicant's Well #1 (MALH 52014): Based on a review of the Well Report, Applicant's Well #1 seems to protect the groundwater resource.

The construction of Applicant Well's #1 may not satisfy hydraulic connection issues.