Groun	ndwater/Hydrology Section G_{-175} R
ROUTED	TO. Water Rights - Jenne
TOWNSHI	ECTION: 175/46E-12
CONDITION	S ATTACHED? [4] yes [] no
REMARKS (DR FURTHER INSTRUCTIONS:
	Mike Zwat
Reviewer	- June Liver

WATER RESOURCES DEPARTMENT

MEMO

December ZI, 200 1

TO: Application G-<u>17513</u>

FROM:

GW: Mike Zwart (Reviewer's Name)

SUBJECT: Scenic Waterway Interference Evaluation

___YES

The source of appropriation is within or above a Scenic Waterway

_YES Use the Scenic Waterway condition (Condition 7J)

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 ______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
					-			E - dettion"			
							a	-	5		

PUBLIC INTEREST REVIEW FOR GROUND WATER APPLICATIONS

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TO:		Wate	r Rights S	ection				Dat	e Decemb	er 21, 2	011	
FROM	5	Grou	nd Water/	Hydrology	Section _	Mich	ael Zwart					
ST ID IE	CT.	Appl	igation G	17513		Revi	ewer's Name	viou of				
SODI		Аррі		1/515		Su	persedes re			Date of Re	view(s)	
PUBL OAR 69 welfare, to deter the pres	IC INT 90-310-1 safety a mine who umption	EREST 30 (1) 1 nd heal ether the criteria	T PRESU The Depart th as descr e presumpti . This revie	MPTION; ment shall p ibed in ORS ion is establic w is based	GROUN <i>bresume tha</i> <i>537.525</i> . I ished. OAF upon avai	DWATE at a propos Department & 690-310- lable infor	R ed groundw t staff review 140 allows t rmation and	<i>ater use will</i> v ground wat he proposed I agency po li	ensure the pres er applications use be modified icies in place at	ervation under OA l or condi t the time	of the pub R 690-3 1 tioned to e of evalu	blic 10-140 meet ation.
A. <u>GE</u>	NERAL	, INFC	RMATIC	<u>DN</u> : A	pplicant's 1	Name:	<u>Melvin W</u>	ilson		County:	Malheu	ur
A1.	Applica	unt(s) se	ek(s) <u>1.2</u>	032_cfs from	m <u>one</u>	well((s) in the	Malheur				_ Basin,
		Jacobse	en Gulch			subb	asin Qu	ad Map: <u>M</u>	alheur Butte			
۵2	Propose	d use:	Ĭre	agation 00	acros	Sea	onality	March 1 t	o October 31			
A3.	Well an	d aquif	er data (att	ach and nu	mber logs	for existin	g wells; ma	rk proposed	wells as such	under log	gid):	
Well	Log	id	Applicant Well #	's Pro	oposed mifer*	Propos Rate(cf	ed (T	Location /R-S OO-O)	Location 2250' N	n, metes a	and bound fr NW cor	ds, e.g. · S 36
1	MALH	[490	MLH 49	0 Terti	ary Seds.	1.203	2 17S/4	17S/46E-12 SE-NE		45' S fr N	E cor S 12	2
2												
4												
5 * Alluvii	Im CRB	Bedrock	~									
		Dearocr										
Well	Well Elev ft msl	First Water ft bls	. SWL ft bls	SWL Date	Well Depth (ft)	Seal Interval (ft)	Seal Casing Liner I nterval Intervals Intervals (ft) (ft) (ft)		Perforations Or Screens (ft)	Well Yield (gpm)	Draw Down (ft)	Test Type
1	2335	29	9	12/12/78	887	0-18	0-20	None	None	800	230	Р
Use data	from app	lication	for proposed	wells.								
A4.	Comme	ents: <u>T</u>	<u>ie reportec</u>	l well produ	uction is q	uite high f	or a well th	at develops	the Glenns Fer	ry Form	ation.	
A5. 🛛	Provisi manage (Not all Comme	ions of ment of basin r nts:	the <u>Malhe</u> ground wa ules contain	ur ter hydrauli 1 such provi	cally conne sions.)	ected to sur	Basin ru face water	lles relative t □ are , <i>or</i> ∑	o the developm	ent, class ated by th	ification a lis applica	and/or ation.
A6. 🗌	Well(s) Name o Comme	# f admin nts:	istrative ar	,_	······································	,	, ta	p(s) an aquif	èr limited by an	administ	rative res	triction.

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

- Based upon available data, I have determined that ground water* for the proposed use: B1.
 - is over appropriated, is not over appropriated, or is cannot be determined to be over appropriated during any а. 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;
 - will not or will likely be available in the amounts requested without injury to prior water rights. * This finding b. is limited to the ground water portion of the injury determination as prescribed in OAR 690-310-130;
 - will not or will likely to be available within the capacity of the ground water resource; or C.
 - **will, if properly conditioned, avoid injury to existing ground water rights or to the ground water resource:** d. 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;
- Condition to allow ground water production from no deeper than ft. below land surface; B2. a.
 - **Condition** to allow ground water production from no shallower than ft. below land surface; b.
 - _____ ground c.
 - Well reconstruction is necessary to accomplish one or more of the above conditions. The problems that are likely to d. 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):

B3. Ground water availability remarks: The only observation wells in the general area penetrate an overlying alluvial aquifer, so they are not especially useful to evaluate groundwater availability for the deeper aquifer (Glenns Ferry Formation) penetrated at this well. It appears that there is limited but increasing local development of the deeper aquifer for irrigation despite the fact that well production is often only moderate at best.

Version: 08/15/2003

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	Glenns FerryFormation of GW Report #34 (Tig)	\boxtimes	

Basis for aquifer confinement evaluation: <u>The water-bearing zones in the Glenns Ferry Formation are typically</u> relatively deep relative to the static water level. At this well, the first reported water-bearing zone is fairly shallow, but I suspect that the major zone is near the bottom of the well.

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	N. Fk. Jacobsen Gulch	2326	2320	350		
1	2	Jacobsen Gulch at confluence	2326	2285	2700		

Basis for aquifer hydraulic connection evaluation: <u>The aquifer developed in the Glenns Ferry Formation likely</u> <u>discharges to the overlying or adjacent alluvial deposits and therefore is in indirect and inefficient hydraulic connection</u> with the creeks.

Water Availability Basin the well(s) are located within: <u>Malheur R > Snake R @ mouth (31011701)</u>

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 < ¼ 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?

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 (2) 30 days (%)	Potential for Subst. Interfer. Assumed?
									<	
									be a second s	
Comm	ents:	This sect	ion does	not apply.				vv		

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												
Interfere	ence CFS												
Distrib	uted Well	S											
Well	SW#	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
		%	%	%	%	%	%	%	%	%	%	%	%
Well Q	as CFS												
Interfere	ence CFS								· · · · ·				
		%	%	%	%	·- %	%	%	%	%	%	%	%
Well Q	as CFS												
Interfere	ence CFS												
		%	%	%	%	%	%	%	%	%	%	%	%
Well Q	as CFS												
Interfere	ence CFS					198 - 1		- L.	d e Ber				
		%	%	%	%	%	%	%	%	%	%	%	%
Well Q	as CFS					4 . ¹			1.110.12	19 mil 12 -			
Interfere	ence CFS	. O.,			4			1.1	645	4 (m. 17)			
		%	%	%	%	%	%	%	%	%	%	%	%
Well Q	as CFS										5		
Interfere	ence CFS						1. 1. 1.						
		%	%	%	%	%	%	%	%	%	%	%	%
Well Q	as CFS						6 A.	*				ing a	
Interfere	ence CFS		1 million				Ushel	4			est an F	-	
(A) = To	tal Interf.												
(B) = 80	% Nat. Q												
(C) = 1 9	% Nat. Q												
(D) = (A) > (C)	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
(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.

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	Basis for impact evaluation:
16	600.00.040 (5) (b) The potential to impose or detain and all self-set the multiplication is to be detained by the W
۶D.	Rights Section.
5. [If properly conditioned, the surface water source(s) can be adequately protected from interference, and/or ground water u under this permit can be regulated if it is found to substantially interfere with surface water: i. <a>The permit should contain condition #(s)
	ii. The permit should contain special condition(s) as indicated in "Remarks" below;
. S	W / GW Remarks and Conditions
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R G	eferences Used: <u>Ground Water Report #34 by Marshall Gannett; local well logs; local reviews, especially G-17510 6</u> -17117.
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_	
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Applica	tion G- <u>17513</u> Continued Date: <u>December 21, 2011</u>
D. <u>WE</u>	LL CONSTRUCTION, OAR 690-200
D1.	Well #: Logid: MALH 490
D2.	THE WELL does not meet current well construction standards based upon: a. review of the well log; b. field inspection by; c. report of CWRE; d. other: (specify);
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:
D5.	 THE WELL a. was, or was not constructed according to the standards in effect at the time of original construction or most recent modification. b lon't know if it met standards at the time of construction
D6. 🗌	Route to the Enforcement Section. I recommend withholding issuance of the permit until evidence of well reconstruction is filed with the Department and approved 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:
	,200
D8.	[Enforcement Section Signature] Route to Water Rights Section (attach well reconstruction logs to this page).

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