# Water Right Conditions Tracking Slip Groundwater/Hydrology Section FILE # # \_ G-17909 ROUTED TO: \_ Water Rights TOWNSHIP/ RANGE-SECTION: \_ 155/146-33 CONDITIONS ATTACHED?: \*\* Yes [] no REMARKS OR FURTHER INSTRUCTIONS: \_ W/in USES Groundwater \_ Study Area

Reviewer: K. Lite

### WATER RESOURCES DEPARTMENT

issued for the proposed use.

MEMO	September 4, 2014
то:	Application G-17909
FROM: SUBJECT: Evaluation for	GW: K. Lite  (Reviewer's Name)  Scenic Waterway Interference & General/Local Surface Water or Deschutes Ground Water Study Area
The source of	appropriation is within or above the <u>Deschutes</u> Scenic Waterway
Use the Sceni	c Waterway condition (Condition 7J).
PREPONDE	RANCE OF EVIDENCE FINDING UNDER ORS 390.835:
ground water free-flowing	has found that there is a preponderance of evidence that the proposed use of will measurably reduce the surface water flows necessary to maintain the character of the Scenic Waterway necessary for recreation, fish and wildlife.
LOCALIZED	IMPACT FINDING
The propose	d use of ground water will have a localized impact to surface water in the  River/Creek Subbasin.
pursuant to th	ed impact line above is checked, then the water use under any right issued his application is presumed to have a localized impact on surface water entified subbasin. Mitigation of the impact, originating from within the Local

If the localized impact line above is not checked, then the water use under any right issued pursuant to this application is presumed to have a general (regional) impact on surface water. Mitigation of the impact, originating anywhere within the Deschutes Basin above the Madras gage, will be required before a permit may be issued for the proposed use.

Zone of Impact identified by the Department, will be required before a permit may be

## PUBLIC INTEREST REVIEW FOR GROUND WATER APPLICATIONS

TO:		Water	r Rights S	ection			Date 09/02/2014						
FROM	[:	Grou	nd Water/	Hydrology Se	ection								
SUBJE		••		17909		Su	•	view of		Date of Re	eview(s)		
OAR 69 welfare, to deter	<b>90-310-1</b> , <i>safety a</i> mine wh	<b>30 (1)</b> 7 nd healt ether the	The Depart th as descr e presumpt	<i>ibed in ORS 53</i> ion is establish	sume that 37.525, D ned. OAR	t a propose Department 690-310-	ed groundwe staff review 140 allows t	ground wate he proposed	ensure the presser applications use be modified cies in place at	under OA d or cond	R 690-3: itioned to	10-140 meet	
A. <u>GE</u>	NERAL	INFO	RMATIC	ON: App	licant's N	Name: <b>V</b>	Waibel Ran	ches, LLC		County: _	Crook		
A1.	Applica	int(s) se	ek(s) (1.7	7gpm) .004	cfs fr	om	_1	_ well(s) in t	he Desci	nutes		_ Basin,	
		Crooke	d River			subb	asin Qu	ad Map: Po	well Butte				
A2. A3.			Recreati					Year-roun	d wells as such	under lo	gid):		
Well	Log Croo 5		Applicant Well #		fer*	Propose Rate(cf	s) (T	Location /R-S QQ-Q) /14E-33 BDI	2250' 1	n, metes a N, 1200' E , 257' W fr	fr NW con	r <b>S</b> 36	
2		5007	<del></del>	Descriu	tes I III	0,004	135/	14E-33 BD1	, 2000 5,			.,500	
3 4	1												
5													
* Alluvii	um, CRB,	Bedrock											
Well	Well Elev ft msl	First Water ft bls	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	
1	3132	450	419	02/26/2002	500	0 to 18.5	+1.5 to 18.5	5 to 500	420 to 490	500		A	
Lise data	from ann	lication t	for proposed	l wells							<u> </u>		
A4.	Commo FORM GROU TRAIL	ents: <u>W</u> ATION NDWA CROS	ELL IS C I. GROUN TER / SU SING. W	ONSTRUCTI ID-WATER F RFACE WAT	LOW IS TER INT ATED W	TOWAR ERACTI VITHIN T	RDS THE NON IS LIKE THE USGS	ORTH - NO ELY AT TH	THIN THE INTERPRETATION OF THE PROPERTY OF T	THE CL RIVER	OSEST BELOW	<u>/</u> AREA	
A5. 🛛	manage (Not all Comme	ment of basin r ents:	ules contai WELL W	ater hydraulica n such provisio	illy conne ons.) CATED V	ected to su WITHIN 7	rface water	are, or	o the developm are not, activ	vated by t	his applic	cation.	
A6. □	Name of	of admin	istrative ar	rea:,					er limited by an	administ	rative res	triction.	

Version: 08/15/2003

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

Bas	sed 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 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 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)
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;
<b>:</b> .	Condition to allow ground water production only from the ground water reservoir between approximately ft. and ft. below land surface;
<b>d</b> .	Well reconstruction is necessary to accomplish one or more of the above conditions. The problems that are likely to 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.
	<b>Describe injury</b> -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):
24) ST. DE TR	ound water availability remarks: THE NEAREST STATE OBSERVATION WELL IS OBS WELL 1315 (CROO, ABOUT 2.6 MILES TO THE NORTHEAST. IT HAS BEEN MONITORED PERIODICALLY SINCE 1994.  ATE OBSERVATION WELL 1315 SHOWS A SHARP DECLINE BETWEEN 1994 AND 1996, A SHALLOWER CLINE SLOPE BETWEEN 1997 AND 2002, AND A STEEPENING SLOPE FROM 2002 TO PRESENT. THIS END IS MOSTLY COINCIDENT WITH CLIMATE CYCLES. SINCE 1994, THE WATER LEVEL HAS COPPED ABOUT 21 FEET, MOSTLY AS A RESULT OF DECREASED RECHARGE.
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### C. GROUND WATER/SURFACE WATER CONSIDERATIONS, OAR 690-09-040

C1. 690-09-040 (1): Evaluation of aquifer confinement	CI.	<b>YU-UY-U4U</b>	(1):	Evaluation	of a	aquifer	confinemer	ıt:
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Well	Aquifer or Proposed Aquifer	Confined	Unconfined
	The Address		
			<u> </u>
Basis for	r aquifer confinement evaluation:		

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	Potentia Subst. In Assum	terfer.
<b>I</b>			It msi	It msi		TES NO ASSUMED	YES	NO
	T							
	T							
Basis for	r aquif	er hydraulic connection evaluation	on:					

Water Availability Basin the well(s) are located within:

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 @ 30 days (%)	Potential for Subst. Interfer. Assumed?
Comments:	<u> </u>								I

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-Di	stributed	Wells											
Well	SW#	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
		%	%	%	%	%	%	%	%	%	%	%	%
Well Q a	as CFS												
	nce CFS												
	uted Well						_			_	_		_
Well	SW#	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
		%	%	%	%	%	%	%	%	%	%	%	%
Well Q a									1				
Interfere	nce CFS												
		%	%	%	%	%	%	%	%	%	%	%	%
Well Q a	as CFS												
Interfere	nce CFS												
		%	%	%	%	%	%	%	%	%	%	%	%
Well Q a	as CFS												
Interfere	ence CFS												
		%	%	%	%	%	%	%	%	%	%	%	%
Well Q a	as CFS							1710					
Interfere	ence CFS												
		%	%	%	%	%	%	%	%	%	%	%	%
Well Q a	as CFS										1		
Interfere	ence CFS				·								
		%	%	%	%	%	%	%	%	%	%	%	%
Well Q a	as CFS												
Interfere	ence CFS												
(A) T	tal Interf.		<u> </u>	1	T	Γ							
									ļ				
	% Nat. Q												
(C) = 1.9	% Nat. Q	L											
(D) = (A)	) > (C)	<b>/</b>	1	1	<b>V</b>	<b>1</b>	1	<b>/</b>	<b>/</b>	1	<b>✓</b>	1	✓
$(\mathbf{E}) = (\mathbf{A})$	/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.

Basis for impact evaluation:

690-09-040 (5) (b) The potential to impair or detrimentally affect the public interest is to be determined by the W Rights Section.    If properly conditioned, the surface water source(s) can be adequately protected from interference, and/or ground water under this permit can be regulated if it is found to substantially interfere with surface water:	plication G- 17909 continued	Date 02 September 20
Rights Section.    If properly conditioned, the surface water source(s) can be adequately protected from interference, and/or ground water under this permit can be regulated if it is found to substantially interfere with surface water:		
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under this permit can be regulated if it is found to substantially interfere with surface water:  i.	Rights Section.	
SW / GW Remarks and Conditions  Condition with 7B  Condition with 7B  References Used: USGS WRIR 00-4162; WRIR 02-4015; SIR 2013-5092; OWRD STATE OBSERVATION WELL DATA (STATE OBS WELL 1315 = CROO 24); GROUND WATER APPLICATION FILE G-16682; WELL REPOR	under this permit can be regulated if it is found to substantially interfere with surf i.   The permit should contain condition #(s)	ace water:
Condition with 7B  References Used: USGS WRIR 00-4162; WRIR 02-4015; SIR 2013-5092; OWRD STATE OBSERVATION WELL DATA (STATE OBS WELL 1315 = CROO 24); GROUND WATER APPLICATION FILE G-16682; WELL REPOR	ii. The permit should contain special condition(s) as indicated in "Rema	rks" below;
Condition with 7B  References Used: USGS WRIR 00-4162; WRIR 02-4015; SIR 2013-5092; OWRD STATE OBSERVATION WELL DATA (STATE OBS WELL 1315 = CROO 24); GROUND WATER APPLICATION FILE G-16682; WELL REPOR		
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	DATA (STATE ORS WELL 1315 = CROO 24): CROUND WATER APPLICAT	TON FILE G-16682: WELL REPOR
CROO 55007, FOWELL BUTTE AND O NEIL QUADRANGLE MATS.		ION FILE G-10082; WELL REFOR
	CROO 55007; FUWELL DUTTE AND U NEIL QUADRANGLE MAPS.	
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# D. WELL CONSTRUCTION, OAR 690-200 D1. Well #: \_\_\_\_1 Logid: CROO 53667 D2: THE WELL does not meet current well construction standards based upon: a. review of the well log; b. field inspection by \_\_\_\_\_ report of CWRE \_\_\_\_\_\_; 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; 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. $\square$ was, or $\square$ was not constructed according to the standards in effect at the time of original construction or most recent modification. b. I don'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:

(Enforcement Section Signature)

D8. Route to Water Rights Section (attach well reconstruction logs to this page).

G-17909: Powell Butte and O'Neil Quadrangles



