# PUBLIC INTEREST REVIEW FOR GROUND WATER APPLICATIONS

TO:		Water	Rights S	Section				Date	01/06/20	11		
FROM	:	Groun	nd Water/	Hydrology	Section	Jen W	oody					
SUBJE	CT:	Appli	cation G-	17446			ewer's Name persedes rev	view of	n/a	Date of Rev	view(s)	
OAR 69 welfare, to determ	90-310-13 safety ar mine whe	30 (1) 7 ad healt ther the	The Depar th as descr e presump	ribed in ORS tion is establi	resume tha 537.525. D shed. OAR	t a propose Department 2 690-310-	ed groundwa staff review 140 allows t	ground wat he proposed	ensure the prese applications use be modified icies in place a	under OA d or cond	R 690-3 itioned to	10-140 meet
A. GEN	ERAL IN	NFORM	IATION:	Applicant's	Name:	Reds Cabi	n LLC		County:	Jackson		
A1.	Applica	nt(s) se	ek(s) <u>0.0</u>	0334 cfs f	rom <u>1</u> w	vell(s) in th	e	Rogue				_Basin,
	E	<u> Bear Cr</u>	eek			subb	asin Qua	ad Map: <u>As</u>	shland			
A2. A3.									ctober 31 & yea l wells as such		gid):	
Well	Logi	id	Applicant Well #		d Aquifer*	Proposed Rate(cfs		Location /R-S QQ-Q)		n, metes a		
1	JACK 2	0370	W CII #		ed bedrock	0.033		/IE 1 SE NW		N, 1200 E N, 1810' E		
3												
4 5												
	ım, CRB,	Bedrock										
Well	Well Elev ft msl	First Water ft bls	I tt ble I	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	2250	260	84	03/02/2010	400	0-38	0-40	none	none	23	276	P
Use data	from appl	ication f	for propose	d wells.								
A4.	Comme	ents:										
A5. 🛛	manager	ment of	ground w	Rogue vater hydrauli in such provi	cally conne	ected to sur	Basin ru face water	les relative to  ☐ are, or  ☐	o the developm are not, activ	ent, class vated by the	ification a	and/or cation.
				iii sucii provi								
A6. 🗌	Name of	f admin	istrative a	rea:					er limited by an		rative res	triction.
	Comme	nts:										

B1.	Bas	sed upon available data, I have determined that ground water* for the proposed use:
	a.	is over appropriated, is not over appropriated, or is 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.	$\square$ will not or $\square$ 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, 7J, 7P  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;
B2.	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.	☐ <b>Well reconstruction</b> 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):
В3.	wat at tl fror den	bund water availability remarks: Groundwater data are sparse for this area. The well log dated 8/24/1977 reports a er level of 85' BLS, and a recent 3/2/2010 measurement of 84' BLS indicates the groundwater level is reasonably stable his well, at the current level of use. There are 9 other domestic well logs available for this section, with yields ranging in 0 to 175 gpm (air tests). The median yield is 27 gpm. A 4 hour pump test at JACK 20370 conducted on 3/2/2010 monstrated the well could produce 23 gpm for 4 hours, and fully recovered after one hour. This shows the well is sonably efficient and can currently produce the requested amount.

Date: 1/6/2010\_\_\_\_\_

Version: 08/15/2003

Application: G- 17466\_\_\_\_\_\_ continued

P0-09-040 (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 n that are evaluated for PSI.    Well SW	0-09-04	40 (1)	<b>:</b> Evaluati	on of aqui	fer confinem	ent:								
Basis for aquifer confinement evaluation: According to the well log, static water level is above the water bearing zone.    20-09-040 (2) (3): Evaluation of distance to, and hydraulic connection with, surface water sources. All wells located a horizontal distance less than ½ 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 n that are evaluated for PSI.    Well   SW	Well			Aquife	r or Propose	ed Aquifer			Confine	ed		1	Unconf	ned
assumed to be hydraulically connected to the surface water source. Include in this table any streams located beyond one in that are evaluated for PSI.    Well   SW	1								$\boxtimes$					
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20-09-040 (2) (3): Evaluation of distance to, and hydraulic connection with, surface water sources. All wells located a horizontal distance less than ½ 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 not that are evaluated for PSI.    Well   SW														
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Third   Thir	horizon assume that are	tal dis d to be evalu	tance less hydraulie ated for P	than ¼ mically conn	ile from a su ected to the	rface water so surface water s	urce that p source. Inc	oroduce water clude in this t Distance	r from able ar	an u ny st Hydi	ncon ream raulic	fined aqu s located ally	ifer sha beyond Por Sub	one mi
1 1 Gaerky Creek 2166 2160 2800 □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	****	#		Juliuce III	tor rvanic			(ft)	YES					
Basis for aquifer hydraulic connection evaluation:	1	1		Gaerky	Creek	2166	2160	2800	$\boxtimes$					]
water Availability Basin the well(s) are located within:Watershed ID #: 70993 BEAR CR > ROGUE R - AT MOUTING FOR THE PROPOSE OF THE PROPO	1	2				2166	1900	4300						
water Availability Basin the well(s) are located within:Watershed ID #: 70993 BEAR CR > ROGUE R - AT MOUTING TOWN AND A STATE TOWN AND A STATE TOWN AND A STATE TOWN AND ASSESSED TOWN ASSESSED TO THE TOWN ASSESSED TOWN ASSE														
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	Water A  G90-09-( connecte that are p Compared distribute	Availal  O40 (4 ed and pertine e the re	bility Bas  Evalua  I less that ent to that equested r	in the well tion of stre surface wa ate against	l(s) are loca eam impacts om a surface ater source, at the 1% of 8	ted within:V for each well water source. and not lower \$60% natural flo	Watershed that has be Limit eva SW source ow for the	ID #: 70993 een determineduation to insect to which the pertinent Wa	BEAF ed or a stream ne strea ater Av	R CR ssum righ am u	> Red to to to another bility	OGUE R  o be hydr d minimu evaluation Basin (W	- AT Maulical m strean is trib	OUTH m flow utary. If Q is a
1   2	water A  S90-09-0  connecte that are p Compare distribute PSI.	Availal  O40 (4 ed and pertine e the re ed by	bility Bas  le Evalua  less than ent to that equested r well, use f	in the wel tion of stream 1 mile fr surface wa ate against full rate for	l(s) are loca eam impacts om a surface ater source, a t the 1% of 8 r each well.	ted within:v for each well water source. and not lower Some natural flower source. Any checked [ Instream Water Right Q	watershed that has be Limit eva SW source bw for the box ind  Qw > 1%	ID #: 70993 een determine duation to insect to which the pertinent Walicates the western was a second with the pertinent Walicates the western was a second with the pertinent Walicates the western was a second with the pertinent Walicates the western was a second with the pertinent Walicates the western was a second with the pertinent Walicates the western was a second with the pertinent was a second with the p	BEAF ed or a stream ne strea ater Avell is as  Qw of Na	R CR ssum righ wailal ssum > 1% 80% ttural	a expense a sexpense a	OGUE R  o be hydr d minimu evaluation Basin (W have the	- AT Maulicalim strean is trib	MOUTH  In the second of the se
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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.

		1 /						
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: Requested rate is 0.033 cfs, which is < 1% of 80% of natural flow. Interference at 30 days was not calculated
because there is not enough site specific data or an appropriate model for the fractured rock aquifer. However, distance and
confinement indicate interference will likely be <<25% at 30 days.

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-Distributed	Wells											
Well SW#	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	%	%	%	%	%	%	%	%	%	%	%	%
Well Q as CFS												
Interference CFS												
								•				
Distributed Wells						_			_	_		_
Well SW#	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	%	%	%	%	%	%	%	%	%	%	%	%
Well Q as CFS												
Interference CFS												
	%	%	%	%	%	%	%	%	%	%	%	%
Well Q as CFS												
Interference CFS												
	%	%	%	%	%	%	%	%	%	%	%	%
Well Q as CFS												
Interference CFS												
	%	%	%	%	%	%	%	%	%	%	%	%
Well Q as CFS	/ •	,,,	7.0	70	,,,	,,,	70	7.0	,,	70	70	7.0
Interference CFS												
Interretellee Cr 5	%	%	%	%	%	%	%	%	%	%	%	%
Well Q as CFS	/0	/0	/0	/0	70	70	/0	/0	70	/0	/0	/0
Interference CFS												
Interference CFS	%	%	%	0/	0/	%	%	0/	%	0/	0/	0/
W. II.O. GEG	%0	%0	%0	%	%	%0	%0	%	%0	%	%	%
Well Q as CFS												
Interference CFS												
(A) = Total Interf.												
(B) = 80 %  Nat.  Q												
(C) = 1 %  Nat.  Q												
$(\mathbf{D}) = (\mathbf{A}) > (\mathbf{C})$	√	<b>√</b>	<b>√</b>	✓	<b>√</b>	<b>√</b>	✓	<b>√</b>	<b>√</b>	✓	✓	√
$(E) = (A / B) \times 100$	%	%	%	%	%	%	%	%	%	%	%	%
A) = total interferen	1		L		<u> </u>	<u> </u>	L					l

(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.

oplic	cation: G-1/466 continued Date: 1/6/2010 :
-	Basis for impact evaluation:
•	
-	
o.	690-09-040 (5) (b) The potential to impair or detrimentally affect the public interest is to be determined by the Wate Rights Section.
	under this permit can be regulated if it is found to substantially interfere with surface water:  i.   The permit should contain condition #(s)
	ii. The permit should contain special condition(s) as indicated in "Remarks" below;
. SV	W / GW Remarks and Conditions:
_	
_	
_	
_	
D.	ofonomous Usada
Be	eferences Used:
<del>_</del>	The Market Wild Wilder and Dall's I War in Dr. E. Wall, H.C. Carlanin I Community of the D. Niller Community of the Community
<u>Ur</u> Ol	ina Ma, Ian P. Madin, Keith V. Olson, and Rudie J. Watzig, Ray E. Wells, U.S. Geological Survey, Alan R. Niem, Oregon Stateniversity, George R. Priest, DOGAMI; additional help by Darrick E. Boschmann, Marie W. Brophy, Christina L. Furnari, livia L. Miller, Luke M. Raymond and Josh I. Thuele, 2009, Oregon Geospatial Data Compilation (OGDC Release-5), Oregon epartment of Geology and Mineral Industries, ArcGIS datafiles.

<b>D.</b> <u>W</u>	ELL CONSTR	UCTION, OAR 690-200
D1.	Well #:	Logid:
D2.	<ul><li>a.  review</li><li>b.  field i</li><li>c.  report</li></ul>	oes not meet current well construction standards based upon:  of the well log; aspection by of CWRE (specify)
D3.	a.	onstruction deficiency: tutes a health threat under Division 200 rules; ingles water from more than one ground water reservoir; s the loss of artesian head; s the de-watering of one or more ground water reservoirs; (specify)
D4.	THE WELL c	onstruction 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.
D6. [		b.
THIS	SECTION TO	BE COMPLETED BY ENFORCEMENT PERSONNEL
		on deficiency has been corrected by the following actions:
		, 200
	(Enfor	cement Section Signature)
D8. [	Route to Wat	er Rights Section (attach well reconstruction logs to this page).

Application: G- 17466\_\_\_\_\_ continued

Date: 1/6/2010\_\_\_\_\_

6

Application: G- 17466\_\_\_\_\_\_ continued Date: 1/6/2010\_\_\_\_\_

# Water Availability

DEC

STO

65.30

89,800

137.00

74,400

# DETAILED REPORT ON THE WATER AVAILABILITY CALCULATION

## BEAR CR > ROGUE R - AT MOUTH

-72.20

24,300

Watershed ID #: 70993 Basin: ROGUE Exceedance Level: 80

Time: 11:	Time: 11:56 AM Date: 01/04/2011									
Month	Month Natural Cons Stream U Flow St		1							
		Monthl	y values are in	cfs.						
		Storage is the an	nual amount at	50% exceedai	nce in ac-ft.					
JAN	107.00	193.00	-85.50	0.00	170.00	-256.00				
FEB	129.00	236.00	-107.00	0.00	170.00	-277.00				
MAR	129.00	215.00	-85.50	0.00	170.00	-256.00				
APR	105.00	31.10	73.90	0.00	170.00	-96.10				
MAY	84.20	47.20	37.00	0.00	170.00	-133.00				
JUN	61.60	73.40	-11.80	0.00	100.00	-112.00				
JUL	28.10	94.20	-66.10	0.00	40.00	-106.00				
AUG	19.30	79.80	-60.50	0.00	24.00	-84.50				
SEP	17.10	56.50	-39.40	0.00	20.00	-59.40				
OCT	18.30	18.10	0.18	0.00	24.00	-23.80				
NOV	30.90	57.90	-27.00	0.00	62.00	-89.00				

0.00

0

153.00

76,600

-225.00

0

Date: 1/6/2010\_\_\_\_\_

# **Well Location**

