## Water Right Conditions . Tracking Slip

Groundwater/Hydrology Section

FILE # # 6-17469

ROUTED TO: Water Rights

TOWNSHIP/ RANGE-SECTION: 65/3W-11

CONDITIONS ATTACHED?: [ Yes [] no

REMARKS OR FURTHER INSTRUCTIONS:

see conditions on p 2.

Reviewer: J. Hackett

### WATER RESOURCES DEPARTMENT

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TO:		Appli	cation	G- <u></u>	7469						
FRO	M:	GW:	J.	Hac	kett						
SUBJ	ECT:	Sceni	c Water	rway In	Name) iterfere	nce Eva	luation				
U	_YES	The so	ource of	approp	riation i	s within	or abov	ve a Sce	enic Wa	terway	
- · ·	_YES	Use th	e Sceni	c Water	way cor	ndition (	Conditi	on 7J)			
. (*)											
	interfe	rence w	ith surf	ace wat	d Water er that c ributed	ontribut					ater
-	interfe the De that th	rence we partme ne prop	vith surf ent is un osed us	ace wate	d Water er that c find the neasura ee-flow	ontribut at ther bly red	es to a se is a pruce the	scenic v repondo surface	vaterwa erance e water	y; there of evide flows	efore,
Calcula calculat informit Exerci	RIBUTION THE	rcentage riteria in Rights th	of consum 390.835, at the De	nptive use do not fil partment culated t	by mont. If in the to is unable o reduce	able but contact to make the month	heck the a Prepon ly flows	"unable" derance s in	option a of Eviden	bove, thu ce findin	s g. Scenic
which	surface	water f	low is re	educed.		7					
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec

#### PUBLIC INTEREST REVIEW FOR GROUND WATER APPLICATIONS Date July 21, 2011 TO: Water Rights Section FROM: Ground Water/Hydrology Section \_\_\_\_\_ J. Hackett Reviewer's Name Application: G- 17469 Supersedes review of \_\_\_\_\_ SUBJECT: Date of Review(s) PUBLIC INTEREST PRESUMPTION: GROUNDWATER OAR 690-310-130 (1) The Department shall presume that a proposed groundwater use will ensure the preservation of the public welfare, safety and health as described in ORS 537.525. Department staff review ground water applications under OAR 690-310-140 to determine whether the presumption is established. OAR 690-310-140 allows the proposed use be modified or conditioned to meet the presumption criteria. This review is based upon available information and agency policies in place at the time of evaluation. A. GENERAL INFORMATION: Applicant's Name: Chapin Living Trust County: Marion Applicant(s) seek(s) 1.0 cfs from 1 well(s) in the Willamette A1. Basin. Quad Map: Mission Bottom \_\_\_\_ subbasin A2. Proposed use: \_\_\_\_\_ Agricultural \_\_\_\_\_ Seasonality: \_\_\_ September 1 to November 30 Well and aquifer data (attach and number logs for existing wells; mark proposed wells as such under logid): A3. Applicant's Proposed Location Location, metes and bounds, e.g. Well Logid Proposed Aquifer\* Well# Rate(cfs) (T/R-S QQ-Q) 2250' N, 1200' E fr NW cor S 36 Proposed Alluvium 1 1 1.0 6S/3W-11 NW-SE 850'S, 870'E fr C1/4 cor S 11 2 3 4 5 Alluvium, CRB, Bedrock Well First Well Seal Casing Liner Perforations Well Draw **SWL** SWL Test Well Elev Water Depth Interval Intervals Intervals Or Screens Yield Down ft bls Date Type ft msl ft bls (ft) (ft) (ft) (ft) (ft) (gpm) (ft) 1 120 0 to 40 40 to 80 est. 80 est. 0 to 20 est. est. Use data from application for proposed wells. A4. Comments: A5. Provisions of the Willamette Basin rules relative to the development, classification and/or management of ground water hydraulically connected to surface water $\square$ are, or $\bowtie$ are not, activated by this application. (Not all basin rules contain such provisions.) Comments: \_\_\_ The applicant's well will not be within ¼ mile of the nearest surface water source, so the pertinent basin rules do not apply. \_, \_\_\_\_, \_\_\_, \_\_\_, \_\_\_, tap(s) an aquifer limited by an administrative restriction. Name of administrative area:

Comments: \_\_\_\_\_\_

Bas	ed 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.	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;
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 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.
	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):
Gre	ound water availability remarks:
app	applicant's well is located in an area that contains highly permeable alluvial sediments from land surface to a depth of roximately 70 feet. 500 feet of mostly fine-grained sediments that contain thin sand and gravel beds (5-10 feet) underlies permeable sediments. The applicant's well will be completed in the coarse grained alluvium.
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Date: July 21, 2011

Application: G-17469 \_\_\_\_ continued

Well			Aquife	r or Proposed	l Aquifer			Confined	U	nconfined	
1_				alluvial						$\boxtimes$	
<u> </u>	-						_				
	-							<u> </u>		- 片	
Basis fo	r aquif	er confine	ment eva	aluation: _T	he shallow all	uvial aqui	fer is not loc	ally confined	by fine-grain	ed Willame	
Silt sedi	nents.										
0_09_0	40 (2) (	(3) • Evalua	ation of c	listance to an	nd hydraulic c	onnection	with surface	e water sourc	es Allwells l	ocated a	
horizon	tal dist	ance less th	nan ¼ mi	le from a surf	face water sou	irce that pi	oduce water	from an unc	onfined aquife	er shall be	
assume	d to be	hydraulica	lly conne	ected to the su	ırface water s	ource. Incl	lude in this ta	able any strea	ams located be	eyond one n	
that are	evalua	ted for PSI									
	CIV				GW	sw	Distance	   Hydra	ulically		
Well	SW #	Sı	ırface Wa	ter Name	Elev	Elev	Distance (ft)	Conn	ected?	Potential for Subst. Interfe	
					ft msl	ft msl			ASSUMED		
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1	3		Willamett		100	90	12300				
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Application: G- 17469 continued

Date: July 21, 2011

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>	Instream Water	Instream Water	Qw>	80% Natural	Qw > 1% of 80%	Interference	Potential for Subst.
#	5 cfs?	Right ID	Right Q (cfs)	1% ISWR?	Flow (cfs)	Natural Flow?	@ 30 days (%)	Interfer. Assumed?
		_			_			

the distance between the well and lo nping impacts to local surface water	t that the well produces from an of the pumping rate after 30 days of

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 V	/ells											
Well	SW#	Jan	Feb	Mar	Apr	May	Jun	_Jul	Aug	Sep	Oct	Nov	Dec
		%	%	%	%	%	%	%	%	%	%	%	%
Well Q	as CFS												
Interfer	rence CFS												
		1 1 1 1 1					100 100		Tel- m _ III				
	uted Wells												
Well	SW#	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
		_%	%	%	_ %	%	%	%	%	%	%	_ %	%
	as CFS												
Interfer	ence CFS												
		%	%	%	%	%	%	%	%	%	%	%	%
Well Q	as CFS												_
Interfer	ence CFS												
		%	%	%	%	%	%	%	%	%	%	%	%
Well Q	as CFS												
	ence CFS							_					
		%	%	%	%	%	%	%	%	%	%	%	%
Well O	as CFS											, ,	
	ence CFS												
		%	%	%	%	%	%	%	%	%	%	%	%
Well O	as CFS	,,,		70		70	70		70			70	70
	ence CFS											_	_
		%	%	%	%	%	%	%	%	%	%	%	%
Well O	as CFS	70	70	70		70	70	- 70		70	- 70		/0
	ence CFS						-						
merie	elice Ci b	-	THE REAL PROPERTY.										
(A) = T	otal Interf.							7,00		17 1-11	1		
(B) = 80	% Nat. Q						-						
(C) = 1	% Nat. Q												
90000		1000	1						-	11-			
	A) > (C)	1	√ ·	√ ·	V	V	V.	<b>√</b>	√ n/	√ /	√	1	V
$(\mathbf{E}) = (A$	/ 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.

Version: 08/15/2003

olication: G- 17469 continued	Date: <u>July 21, 2011</u> 5
2 1 222/	ver were not calculated because the requested rate is less than 1%
690-09-040 (5) (b) The potential to impair or detrimen Rights Section.	tally affect the public interest is to be determined by the Water
under this permit can be regulated if it is found to substantia	e adequately protected from interference, and/or ground water use ally interfere with surface water:
<ul> <li>i.  The permit should contain condition #(s)</li> <li>ii.  The permit should contain special condition(s)</li> </ul>	as indicated in "Remarks" below;
SW / GW Remarks and Conditions:	
References Used:	
Conlon, T.D., Wozniak, K.C., Woodcock, D., Herrera, N.B., Fi Ground-water hydrology of the Willamette Basin, Oregon: U.S.	sher, B.J., Morgan, D.S., Lee, K.K., and Hinkle, S.R., 2005, Geological Survey Scientific Investigations Report 2005-5168.
1100 1 1 10 70 1 170 1101 1 10	the Willamette Lowland aquifer system, Oregon and Washington:
	rogeologic framework of the Willamette Lowland aquifer system, Paper 1424-B, 82p.

ication: <u>G-17469</u>	continued	Date: <u>July 21, 2011</u>	6
ELL CONSTRUCT	ON, OAR 690-200		
Well #:	Logid:		
<ul> <li>a.  review of th</li> <li>b.  field inspect</li> <li>c.  report of CV</li> </ul>	e well log; ion by VRE		
a. constitutes a b. commingles c. permits the d. permits the	health threat under Division 200 rules; water from more than one ground wate loss of artesian head; de-watering of one or more ground wate	er reservoirs;	
	· · · · · · · · · · · · · · · · · · ·		
	was, or was not constructed original construction or most rec	according to the standards in effect at the time of ent modification.	
			nstruction
S SECTION TO BE	COMPLETED BY ENFORCEM	ENT PERSONNEL	
Well construction de	ficiency has been corrected by the follo	wing actions:	
		on logs to this page).	_, 200
	Well #:	THE WELL does not meet current well construction stan a.	Well #: Logid:

application:	G- 17469	continued
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Date: July 21, 2011

### Water Availability Tables

# WILLAMETTE R > COLUMBIA R - AB MOLALLA R WILLAMETTE BASIN

Water Availability as of 7/21/2011

Watershed ID #: 182

Exceedance Level:

80%

Time: 7:40 AM

Date: 7/21/2011

### Water Availability Calculation

Monthly Streamflows in Cubic Feet per Second Storage at 50% Exceedance in Acre-Feet

Month	Natural Stream Flow	Consumptive Uses and Storages	Expected Stream Flow	Reserved Stream Flow	Instream Flow Requirement	Net Water Available
JAN	21,400.00	2,160.00	19,200.00	0.00	1,500.00	17,700.00
FEB	23,200.00	7,340.00	15,900.00	0.00	1,500.00	14,400.00
MAR	22,400.00	7,120.00	15,300.00	0.00	1,500.00	13,800.00
APR	19,900.00	6,780.00	13,100.00	0.00	1,500.00	11,600.00
MAY	16,600.00	4,100.00	12,500.00	0.00	1,500.00	11,000.00
JUN	8,740.00	1,820.00	6,920.00	0.00	1,500.00	5,420.00
JUL	4,980.00	1,640.00	3,340.00	0.00	1,500.00	1,840.00
AUG	3,830.00	1,490.00	2,340.00	0.00	1,500.00	844.00
SEP	3,890.00	1,240.00	2,650.00	0.00	1,500.00	1,150.00
OCT	4,850.00	618.00	4,230.00	0.00	1,500.00	2,730.00
NOV	10,200.00	753.00	9,450.00	0.00	1,500.00	7,950.00
DEC	19,300.00	830.00	18,500.00	0.00	1,500.00	17,000.00

### Detailed Report of Instream Flow Requirements

Instream Flow Requirements in Cubic Feet per Second

Application #	Status	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
MF182A	APPLICATIO N	1,500.00	1,500.00	1,500.00	1,500.00	1,500.00	1,500.00	1,500.00	1,500.00	1,500.00	1,500.00	1,500.00	1,500.00
Maximum	100000000000000000000000000000000000000	TANK I	50 10 8		MERCHANICAL PROPERTY.					THE STATE OF	TO THE	BILLER	4-2-6

Version: 08/15/2003

### Well Location Map

