PUBLIC INTEREST REVIEW FOR GROUND WATER APPLICATIONS TO: Water Rights Section Date___September 4, 2008 FROM: Ground Water/Hydrology Section Michael Zwart Reviewer's Name Supersedes review of _____ May 20, 2008 SUBJECT: Application G-__16796 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: William J. Markman County: Wasco A1. Applicant(s) seek(s) 4.456 cfs from three well(s) in the Hood Basin, Fifteenmile Creek Quad Map: Dufur West subbasin Proposed use: Irrigation, 819 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): A2. A3. Applicant's Proposed Proposed Location Location, metes and bounds, e.g. Well Logid Well# Aquifer* Rate(cfs) 2250' N, 1200' E fr NW cor S 36 (T/R-S QQ-Q) 1 Proposed CRB 4.456 3183' N, 1457' E fr SW cor S 35 1 1S/13E-35 SE-NW **Proposed** 2 CRB 4.456 2S/13E-2 NE-NW 550' S, 2550' E fr NW cor S 2 3 Proposed 3 CRB 4.456 2S/13E-3 NE-NE 341' S, 249' W fr NE cor S 3 4 * 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) 1420 1 600 >600 0-350 0-350 2 1600 790 >790 0-390 0-390 3 1565 750 >750 0-350* 0-350 Use data from application for proposed wells. A4. Comments: *750' seal depth on amended application is likely a typo, based on the casing depth. Application was amended to attempt to develop a deep basalt aquifer that is not currently exhibiting water-level decline.

Applica	tion (G- <u>16796</u>	continued	Date: Septe	ember 4, 2008						
в. <u>GR</u>	<u>OUN</u>	<u>ID WATER AVAIL</u>	ABILITY CONSIDERATIONS	S, OAR 690-310-130, 400	0-010, 410-007 <u>0</u>						
B1.	Bas	ed upon available dat	a, I have determined that ground wat	er* for the proposed use:							
	a.	a. ☐ is over appropriated, ☐ is not over appropriated, or ☐ cannot be determined to be over appropriated of the proposed use. * This finding is limited to the ground water portion of the over-appropriate determination as prescribed in OAR 690-310-130;									
	b.		ill likely be available in the amounts ground water portion of the injur								
	c.	☐ will not or ☐ w	ill likely to be available within the ca	pacity of the ground water re	esource; or						
	d.	i. 🛛 The perm ii. 🖾 The perm	conditioned, avoid injury to existing nit should contain condition #(s)	N, 7K (as modified at B3 b l in item 2 below.	elow)						
		iii. 🛛 The perm	nit should contain special condition(s) as indicated in item 3 belov	v;						
B2.	a.	Condition to allo	ow ground water production from no	deeper than	ft. below land surface;						
	b.	☐ Condition to allo	ow ground water production from no	shallower than	ft. below land surface;						
	c.	Condition to allo water reservoir;	w ground water production only from	the <u>basalt</u>	ground						
	d.	occur with this us	ion is necessary to accomplish one or e and without reconstructing are cited rmit until evidence of well reconstruc-	l below. Without reconstruct	tion, I recommend withholding						
			s related to water availability– that is not within the capacity of the resourc								
B3.	The 920 such become for the irrequiff the well	alt resource in the Eigeveral wells in the victines are displayed. The lower than the Winter wells shall be continued feet below land surfate a manner that it allowers apparent that the meeted streams in a manth is permit or the Ground writing, and shall increase can be approved or well is constructed fit depth and construction	y remarks: Staff in the Ground Ventmile Creek and Fifteenmile Creek inity of this proposal. Hydrograph he recommended well-construction or Water Member of the Grande Recously cased and continuously sealed to the for well and 2 and 875 feet below the ground water to be developed from wells can be constructed to eliminate and there than specified in this permit water/Hydrology Section Manage and water/Hydrology Section Manage and the the request made, request and then the request made, request and the the specifications will be incorporated in the specifications will be incorporated in the grand delete strikethrough.)	ek subbasins. Marc Norton is for three of these wells are condition below will likely onde Basalt Formation will to a minimum depth of 775 few land surface for well 3. The any overlying aquifer. If distinction with nearby shall, the permittee can contact to request approval of such construction design for appart to placement of any permarted modification will not be a	has collected water-level data re attached. Water-level rensure that no basalt aquifers be developed. The wells may not be completed in uring well construction, it for the Department Hydrogeologist construction. The request shall oval by the Department. The ment casing and sealing material. approved, the new						
	at le mate inter The equi	ast five (5) business da erials penetrated during vals and at each chang Department may colled pment. The Departme	the Ground Water Hydrology Section ys prior to beginning construction of well construction to be collected. We in lithology and shall be stored and additional data, such as geophysicant shall bear the cost of any such added sealed in such a manner to develop	each well. The Department Vhen required, the samples she properly labeled in containe alor video logs, at any well pational data collection.	may require samples of the nall be collected at ten-foot rs provided by the Department.						

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Application G-16796	continued	Date: September 4, 2008

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
All	Basalt of the Columbia River Basalt Group		

Basis for aquifer confinement evaluation: _Basalt aquifers are typically confined in this area.	
	_
	_

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	Potential for Subst. Interfer. Assumed? YES NO
1	1	Fifteenmile Creek	1430±	1350	2200		
2	1	Fifteenmile Creek	1430±	1355	6100		
3	1	Fifteenmile Creek	1430±	1380	4900		

Basis for aquifer hydraulic connection evaluation: <u>The depth of the the water-bearing zone will preclude hydraulic connection with nearby stream reaches.</u>

Water Availability Basin the well(s) are located within: <u>FIFTEENMILE CR > COLUMBIA R - AB JAMESON CAN.</u>

C3a. 690-09-040 (4): Evaluation of stream impacts for <u>each well</u> 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 \overline{\text{D}} box indicates the well is assumed to have the potential to cause PSI.

Well	sw #	Well < 1/4 mile?	Qw > 5 cfs?	Instream Unstream Water Water Right Right Q ID (cfs)		Qw > 80% Natural Flow (cfs)		Qw > 1% of 80% Natural Flow?	Interference @ 30 days (%)	Potential for Subst. Interfer. Assumed?

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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.

Transaction and initiations apply as in CSa 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: 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.

	istributed	Wells											
Well	SW#	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
		%	%	%	%	%	%	%	%	%	%	%	%
Well Q	as CFS					i							
Interfere	ence CFS												
D: 4 11	4 1 117 11												
Well	outed Well SW#		F-1.	Man	A	M	T	T1	A	0	0-4	NI	D
wen	2 // #	Jan %	Feb	Mar %	Apr %	May 1	Jun %	Jul %	Aug %	Sep %	Oct %	Nov %	Dec
11/-11 0	CEC	70	70	70	70	70	76		70	70	'7a		70
Well Q	ence CFS												
Interier	ence CFS	0/	9/	0/	0/	07	0.4	0/	8/		41.4	41.6	
		º/a	%	%	9/11	1/6	°/a	<u>%</u>	%	%	1/₀	11/4	%
Well Q													
Interfere	ence CFS												
		%	<u>%</u>	%	%	%	%	%	%	%	9/6	%	%
Well Q													
Interfere	ence CFS												
		%	%	%	%	%	%	%	1/4	%	. %	%	%
Well Q													
Interfere	ence CFS								15.				
		%	⁶ / ₀	%	9/4	9/4	⁰⁄₀ .	%	%	%	%	%	%
Well Q													
Interfere	ence CFS						i						
		%	%	11/0	%	%	%	%	%	%	9%	%	%
Well Q	as CFS												
Interfere	ence CFS												
				ſ			ı			<u> </u>			
	tal Interf.												
(B) = 80	% Nat. Q										-		
(C) = 1	% Nat. Q												
(D) = (A	() > (C)	1	-	1	1	V .	1	/	1	1	7	V	1
	/B) x 100	%	9/0	%	0/u	%	°/4	11/0	8/0	9/0	1/0	0/a	%
					ad natural (

(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.

plication G-16796 continued	Date: September 4, 2008
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Basis for impact evaluation:	
	The state of the s
	200
2534 1734	
600 00 040 (E) (b) The meteration to imposit our detailments	
Rights Section.	ally affect the public interest is to be determined by the Water
If properly conditioned, the surface water source(s) can be a under this permit can be regulated if it is found to substantial!	adequately protected from interference, and/or ground water use ly interfere with surface water:
i. The permit should contain condition #(s)	
ii. The permit should contain special condition(s) as	s indicated in "Remarks" below;
SW / GW Remarks and Conditions	
	VCD = 77
References Used: <u>Local well logs; recent reviews; regional g</u>	eologic mapping; Marc Norton, personal communication.

778	

App	cation G-16/96 Continued Date: September 4, 2008	
D. <u>V</u>	ELL CONSTRUCTION, OAR 690-200	
D1.	Well #: Logid:	
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.	
D4.	THE WELL construction deficiency is described as follows:	
D5.	THE WELL was, or 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.	tion
ТН	SECTION TO BE COMPLETED BY ENFORCEMENT PERSONNEL	
D7.	Well construction deficiency has been corrected by the following actions:	
	200	
	(Enforcement Section Signature) , 200	
D8.	Route to Water Rights Section (attach well reconstruction logs to this page).	
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PUBLIC INTEREST REVIEW FOR GROUND WATER APPLICATIONS

9	Merce	ded							
<u>May 20,</u>		#.S							
N/A	D								
	Date of Rev	view(s)							
re the preservation of the public polications under OAR 690-310-140 e modified or conditioned to meet n place at the time of evaluation. County: Wasco									
West			_Basin,						
ober 31 s as such ı	ınder log	;id):							
2250' N	, metes a l, 1200' E l, 1457' E	fr NW cor	S 36						
	, 1457' E 5, 249' W								
341 3	5, 247 11	IL ME COL	33						
forations Screens (ft)	Well Yield (gpm)	Draw Down (ft)	Test Type						
sing dantl	. Annii	otion w	16						

TO:		Wate	r Rights Se	ction				Date	e	May 20,	2008	45	
FROM	:	Grou	nd Water/H	ydrology	Section _	Micha	ael Zwart						
SUBJE	CT:	Appli	ication G	16796			ewer's Name persedes r	eview of	-	N/A	Date of Re	view(s)	
OAR 69 welfare, to detern the press	90-310-1 safety at mine who umption	30 (1) (1) (1) and heal (1) ther the criteria	th as describ e presumptio . This review	ent shall p ed in ORS n is establi v is based	resume the 537.525. ished. OAl upon ava	at a proposi Department R 690-310- ilable infor	ed groundy t staff revie 140 allows mation an	water use will w ground wate the proposed d agency poli	er app use be icies ii	lications us modified n place at	nder OA or condi the time	R 690-31 tioned to of evalu	l0-140 meet
A. GET	A. GENERAL INFORMATION: Applicant's Name: William J. Markman County: Wasco												
A1.	Applica	nt(s) se	ek(s) <u>4.45</u> 6	6_ cfs fro	m <u>thre</u>	e well(s) in the _	Hood					_ Basin,
		<u>Tifteen</u>	mile Creek			subb	asin Q	uad Map: <u>D</u>	ufur \	West			
A2. A3.													
Well	Logid Applicant's Well #			oposed quifer*	Propose Rate(cf		Location				and bound fr NW cor		
1	Propo		1		CRB	4.456	_	3E-35 SE-N	_	3183' N, 1457' E fr SW cor S 35			
3	Propo Propo		3		CRB CRB	4.456 4.456				3183' N, 1457' E fr SW cor S 35 341' S, 249' W fr NE cor S 3			
4	11000	300		 		4.450	201	23/13E-3 NE-NE		0.1 0,200 0.11.200.00			-
5													
* Alluviu	ım, CRB,	Bedrocl	k										
Well	Well Elev ft msl	First Water ft bls	r SWL	SWL Date	Well Depth (ft)	Seal Interval (ft)	Casing Intervals (ft)	Liner Intervals (ft)		forations Screens (ft)	Well Yield (gpm)	Draw Down (ft)	Test Type
2	1420 1420	600 790			>600 >790	0-350 0-390	0-350 0-390						
3	1565	750			>750	0-350*	0-350		\vdash			<u> </u>	
						0.000	_0 220						
Use data	from appl	ication	for proposed v	wells:									
A4. amende	Comme d to atte	nts: <u>*7</u> mpt to	/50' seal der develop a d	th on ame	ended app aquifer t	lication is hat is not c	urrently e	o, based on t xhibiting wat	ter-ley	el decline			<u>as</u>
												127-2	
A5. 🛚	manage (Not all	ment of basin r	f ground wate ules contain	er hydrauli such provi	cally conn sions.)	ected to sur	face water	ules relative t] are	not, activa	ted by th	is applica	and/or
A6. 🗌	Name o	f admir	nistrative area	a:				ap(s) an aquif				rative res	triction.

Applic	ation	G-16/96 Date: May 20, 2008
В. <u>GI</u>	ROUI	ND WATER AVAILABILITY CONSIDERATIONS, OAR 690-310-130, 400-010, 410-0070
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.	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) 7N, 7K (as modified at B3 below); The permit should be conditioned as indicated in item 2 below. 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 <u>basalt</u> ground water reservoir;
	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):
В3.	bas at s dec sha	ound water availability remarks: Staff in the Ground Water Section are concerned about the stability of the salt resource in the Eightmile Creek and Fifteenmile Creek subbasins. Marc Norton has collected water-level data several wells in the vicinity of this proposal. Hydrographs for three of these wells are attached. Water-level clines are displayed. The recommended well-construction condition below will likely ensure that no basalt aquifers allower than the Winter Water Member of the Grande Ronde Basalt Formation will be developed.
	wat con spec Wa a ro rece	e wells shall be continuously cased and continuously sealed to a minimum depth of 775 feet below land surface for wells 1 d 2 and 875 feet below land surface for well 3. The wells may not be completed in such a manner that it allows ground ter to be developed from any overlying aquifer. If during well construction, it becomes apparent that the wells can be astructed to eliminate interference with nearby shallow wells or hydraulically connected streams in a manner other than cified in this permit, the permittee can contact the Department Hydrogeologist for this permit or the Ground ter/Hydrology Section Manager to request approval of such construction. The request shall be in writing, and shall include ough well log and a proposed construction design for approval by the Department. The request can be approved only if it is evived and reviewed prior to placement of any permanent casing and sealing material. If the well is constructed first and in the request made, requested modification will not be approved. If approved, the new well depth and construction cifications will be incorporated into any certificate issued for this permit. (Please add bold language and delete strikethrough)
	at le	e permittee shall notify the Ground Water Hydrology Section of the Department in Salem or the Watermaster in The Dalles east five (5) business days prior to beginning construction of each well. The Department may require samples of the terials penetrated during well construction to be collected. When required, the samples shall be collected at ten-foot ervals and at each change in lithology and shall be stored and properly labeled in containers provided by the Department. Department may collect additional data, such as geophysical or video logs, at any well prior to installation of pumping hipment. The Department shall bear the cost of any such additional data collection.
	The	wells shall be cased and sealed in such a manner to develop a single basalt aquifer.

Application G-16796	continued	Date: May 20, 2008

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
All	Basalt of the Columbia River Basalt Group		
oxdot			
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Basis for aquifer confinement evaluation:	Basalt aquifers are typically confined in this area.
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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	Potential for Subst. Interfer. Assumed? YES NO	
1	_1	Fifteenmile Creek	1430±	1350	2200			
2	1	Fifteenmile Creek	1430±	1350	2200			
3	1	Fifteenmile Creek	1430±	1380	4900			
				<u> </u>				
L								

Basis for aquifer hydraulic connection evaluation: The depth of the the water-bearing zone will preclude hydraulic connection with nearby stream reaches.

Water Availability Basin the well(s) are located within: FIFTEENMILE CR > COLUMBIA R - AB JAMESON CAN.

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 < 1/4 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?
	<u> </u>									

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Application (G-16796
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Date	May 20,	2008	
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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.

CVAIUATION AND IN	initations apply as	III C34 400V	U					
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:	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.

Well	SW#	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
		%	%	%	%	%	%	%	%	%	0/s	º/a	9/0
Well Q a	s CFS												
Interfere													
	uted Well	S											
Well	SW#	Jan	Feb	Mar	Арг	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
		9/1	%	9/6	%	9/0	%	%	%	%	%	%	%
Well Q a													
Interfere	nce CFS												
		%	%	%	%	9/0	%	%	9/0	%	%	%	%
Well Q a	s CFS												
Interfere	nce CFS												
		%	%	%	%	%	%	%	%	%	%	%	%
Well Q a	s CFS												
Interfere	nce CFS												
		%	%	9/0	%	9/0	%	%	u/ ₀	%	%	%	%
Well Q a	s CFS									İ			
Interfere	nce CFS									i			
		%	%	%	%	%	%	%	%	9/0	%	%	%
Well Q a	s CFS												
Interfere	nce CFS									11	- i		
		%	%	%	%	%	%	%	%	n/a	⁰⁄₀	%	0/6
Well Q a	s CFS												
Interfere	nce CFS		_										
(A) = Tot	al Interf.					-	···-						
$(B) = 80^{\circ}$						811							
(C) = 1 %													
(D) = (A))>(C)	/	V	1	1	V	1	~	1	/	1	1	1
(-) (1)	(-)	9/1s	6/a	9/0	%	1/6	0/a	%	%	%	0/6	0/a	%

(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.

cation G-16796continued	Date: May 20, 2008
Basis for impact evaluation:	
	1989
690-09-040 (5) (b) The potential to impair or detriment: Rights Section.	ally affect the public interest is to be determined by the W
If properly conditioned, the surface water source(s) can be under this permit can be regulated if it is found to substantial i. The permit should contain condition #(s)	adequately protected from interference, and/or ground water ally interfere with surface water:
ii. The permit should contain special condition(s) a	as indicated in "Remarks" below:
• • • • • • • • • • • • • • • • • • • •	•
V / GW Remarks and Conditions	
eferences Used: <u>Local well logs; recent reviews; regional</u>	geologic mapping; Marc Norton, personal communication

App	licati	on G- <u>16/96</u>		continued						D	ite: <u>Ma</u> y	20, 20	<u> </u>			
D. <u>y</u>	WEL.	L CONSTR	UCTION	, OAR 69	<u>90-200</u>											
D1.	•	Well #:		_	Log	gid:										
D2.	; 1	THE WELL of a. review b. field in c. reported. other:	of the we nspection l of CWRE	ll log; by												_;
D3.		b.	tutes a hea ingles wat ts the loss ts the de-w	lth threat u er from mo	inder Divi ore than or head; one or mo	ne ground ore groun	l water d water	reserv	oirs;	=			= =	_5_		
D4.	37	THE WELL o		on deficien			_	_								
																_
D5.		THE WELL	a. [_	was n was n construct	tion or m	ost rece	ent mod	ificatio	n.		ffect at	the time	e of		
D6.		Route to the lis filed with the												vell reco	onstruction	1
TH	IS S	ECTION TO	BE CO	MPLETE	D BY E	NFORG	EME	NT PE	ERSO	NNEL						
D7.		Well construct	ion deficie	ncy has be	en correct	ted by the	follow	ing act	ions:							
	5									<u> </u>		(#) ! » () !				_
																_
	- 3															_
	•								<u> </u>							_
		(Enfo	rcement Se	ction Sign	ature)										, 200	—·
D8.		Route to Wat		•	·	ll recons	tructio	n logs t	o this p	page).						
-																=

WATER RESOURCES DEPARTMENT

MEM	0				9		May 20, 200 8					
TO:		Applio	eation C	G- <u>165</u>	796	_						
FROM	И:	GW: Mike Zwart (Reviewer's Name) Scenic Waterway Interference Evaluation										
SUBJ	ECT:											
	_YES _NO	The so	urce of	appropi	riation is	s within	or abov	e a Scei	nic Wat	erway		
- -	_YES _NO	Use the	e Scenic	: Water	way con	dition (Conditio	on 7J)				
	Per OF interfe the De that the	rence wated interest 390.8 rence water the partment of the propertion of the properties of the propert	ith surfar erference 835, the ith surfa ent is ur osed use	Ground Gr	d Water er that c ributed water that c find the reasura	ontribut below. Section ontribut at there bly red	is unates to a second property is a property of the second	Scenic V ole to ca cenic w eponde surface	Vaterwa deulate vaterway erance o e water	ground	water	
Calcula calcula informi	ted, per ci ng Water	rcentage o riteria in Rights th	of consun 390.835, at the De	ptive use do not fii partment	e by montall in the to is unable	ible but c to make	heck the ' a Prepon	'unable'' derance d	option al	bove, thu ce finding	s g	
Water		the follo	wing a	nounts	o reduce express				e consu		Scenic use by	
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	

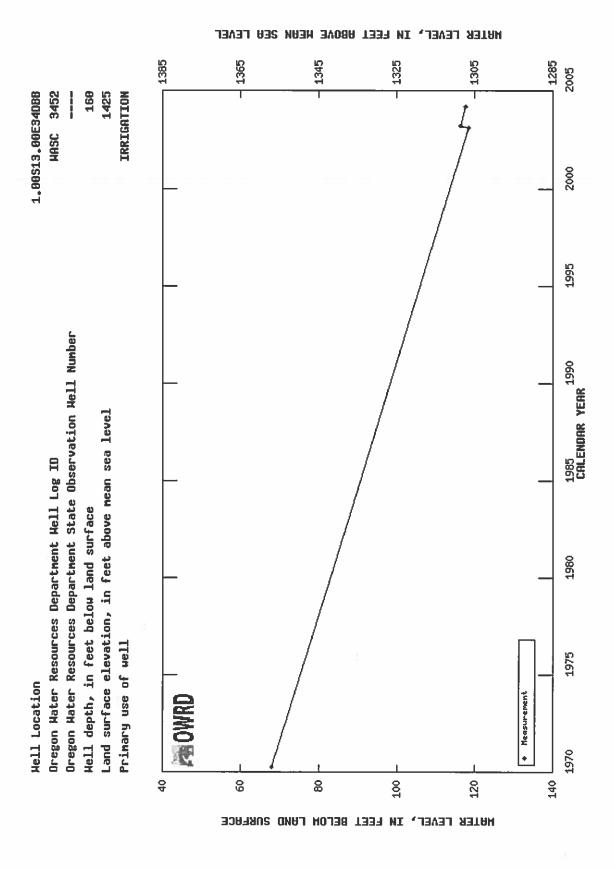


Table showing water-level data for State Well WASC 3452

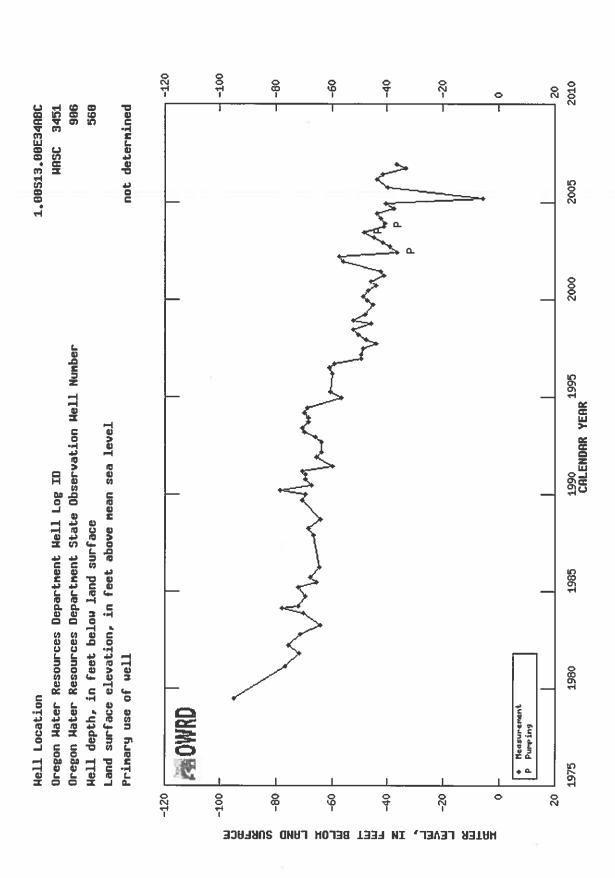


Table showing water-level data for State Well WASC 3451, State Observation Well # 906

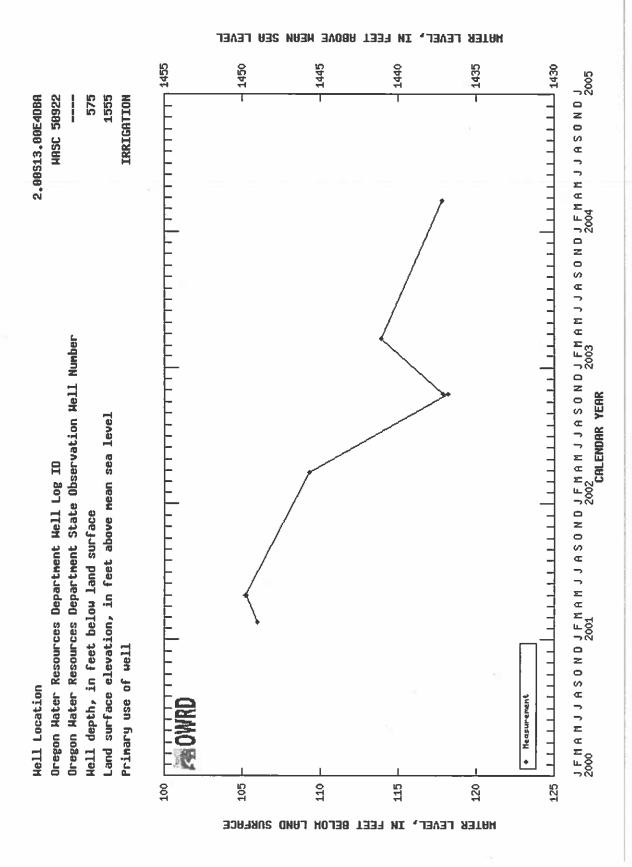


Table showing water-level data for State Well WASC 50922

