

Water Right Conditions Tracking Slip

Groundwater/Hydrology Section

FILE # # G - 17091

ROUTED TO: W.R.

TOWNSHIP/
RANGE-SECTION: 2N/13E-20

CONDITIONS ATTACHED?: yes no

REMARKS OR FURTHER INSTRUCTIONS:

PS1 with Columbia River

Reviewer: Marc A Norton

PUBLIC INTEREST REVIEW FOR GROUND WATER APPLICATIONS

TO: Water Rights Section Date 10/31/2008
 FROM: Ground Water/Hydrology Section Marc Norton
Reviewer's Name
 SUBJECT: Application G- 17091 Supersedes review of
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: Rocky & Jana Webb County: Wasco

A1. Applicant(s) seek(s) 0.45 cfs from 1 well(s) in the Hood Basin,
Gooseberry Creek – Columbia River subbasin Quad Map: The Dalles North

A2. Proposed use: Irrigation + Storage + Reservoir Seasonality: March 1 to Oct 31 for Ir. + year-round

A3. Well and aquifer data (attach and number logs for existing wells; mark proposed wells as such under logid):

Well	Logid	Applicant's Well #	Proposed Aquifer*	Proposed Rate(cfs)	Location (T/R-S QQ-Q)	Location, metes and bounds, e.g. 2250' N, 1200' E fr NW cor S 36
1	WASC51632	1	CRB	0.45	02N/13E-20 SW NE	100' N, 1905' W fr E cor S 20
2						
3						
4						
5						

* Alluvium, 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	260	22	194	2/25/08	315	0 – 124	+1 – 124	-----	-----	120	-----	Air

Use data from application for proposed wells.

A4. **Comments: See conceptual model discussion for more details on geology and ground water. The property and well are located about 2100 feet north of The Dalles Critical Area Boundary.**

Requested discharge rate is 200 gpm = 0.45 cfs

A5. **Provisions of the Columbia River** Basin rules relative to the development, classification and/or management of ground water hydraulically connected to surface water are, or are not, activated by this application. (Not all basin rules contain such provisions.)
 Comments: _____

A6. **Well(s) #** _____, _____, _____, _____, _____, tap(s) an aquifer limited by an administrative restriction.
 Name of administrative area: _____
 Comments: NA

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

B1. Based 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) 7N – Annual Measurement + Large measurement and reporting with totalizing flow meter;
 - 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. 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): _____

B3. Ground water availability remarks: The well for this application develops water from the Columbia River Basalts. The ground water level as reported by the driller on the water well report was 194 feet below land surface which is at an elevation of about 66 feet. The water was encountered in the basalts at a depth of 283 feet or at an elevation of about -20 feet. The normal pool elevation behind Bonneville is 72 feet. The elevation of the bottom of the Columbia River is about -20 feet. There are several geologic structures in this area including a fault and an anticline; both of which trend east-west, perpendicular to the Columbia River. It appears that the basalt flows in the vicinity of the proposed development are relatively horizontal supporting determination that well WASC 51632 is hydraulically connected to the Columbia River.

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	CRBG	<input checked="" type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>

Basis for aquifer confinement evaluation: Ground water levels rose above where encountered in the borehole.

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?			Potential for Subst. Interfer. Assumed?	
						YES	NO	ASSUMED	YES	NO
1	1	Gooseberry Creek	66	240	450	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	2	Columbia River	66	72	3860	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Basis for aquifer hydraulic connection evaluation: The well is over ¼ mile from the Columbia River and develops water from a confined aquifer.

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

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?
1	2	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>		<input type="checkbox"/>	> 70%	<input checked="" type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>

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?
		<input type="checkbox"/>			<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>
		<input type="checkbox"/>			<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>
		<input type="checkbox"/>			<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>
		<input type="checkbox"/>			<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>

Comments: There is no WAB for the Columbia River; therefore there is not in-stream water right or 80% of natural flow values.

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													
Interference CFS													
		%	%	%	%	%	%	%	%	%	%	%	%
Well Q as CFS													
Interference CFS													
(A) = Total Interf.													
(B) = 80 % Nat. Q													
(C) = 1 % Nat. Q													
(D) = (A) > (C)													
(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.

Basis for impact evaluation: _____

C4b. **690-09-040 (5) (b) The potential to impair or detrimentally affect the public interest is to be determined by the Water Rights Section.**

- C5. **If properly conditioned, the surface water source(s) can be adequately protected from interference, and/or ground water use 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;

C6. **SW / GW Remarks and Conditions** _____

References Used: _____

Sherrod, David R. and Scott, William E., Preliminary Geologic Map of the Mount Hood 30- by 60- Minute Quadrangle, Northern Cascade Range, Oregon, Open File Report 95-219, 1995.

Grady, Stephen J., Ground Water Resources in the Hood Basin, Oregon, U.S. Geological Survey Water Resources Investigations Report 81-1108, 1983.

Swanson, D. A. and Others, 1981, Reconnaissance Geologic Map of the Columbia River Basalt Group, Northern Oregon and Western Idaho: U.S. Geological Survey Open-File Report 81-797.

Waters, A.C., 1968, Reconnaissance Geologic Map of the Dufur Quadrangle Hood River, Sherman, and Wasco Counties, Oregon, Miscellaneous Geologic Investigations Map, I-556.

D. WELL 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. 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. 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: _____

_____, 200_____
(Enforcement Section Signature)

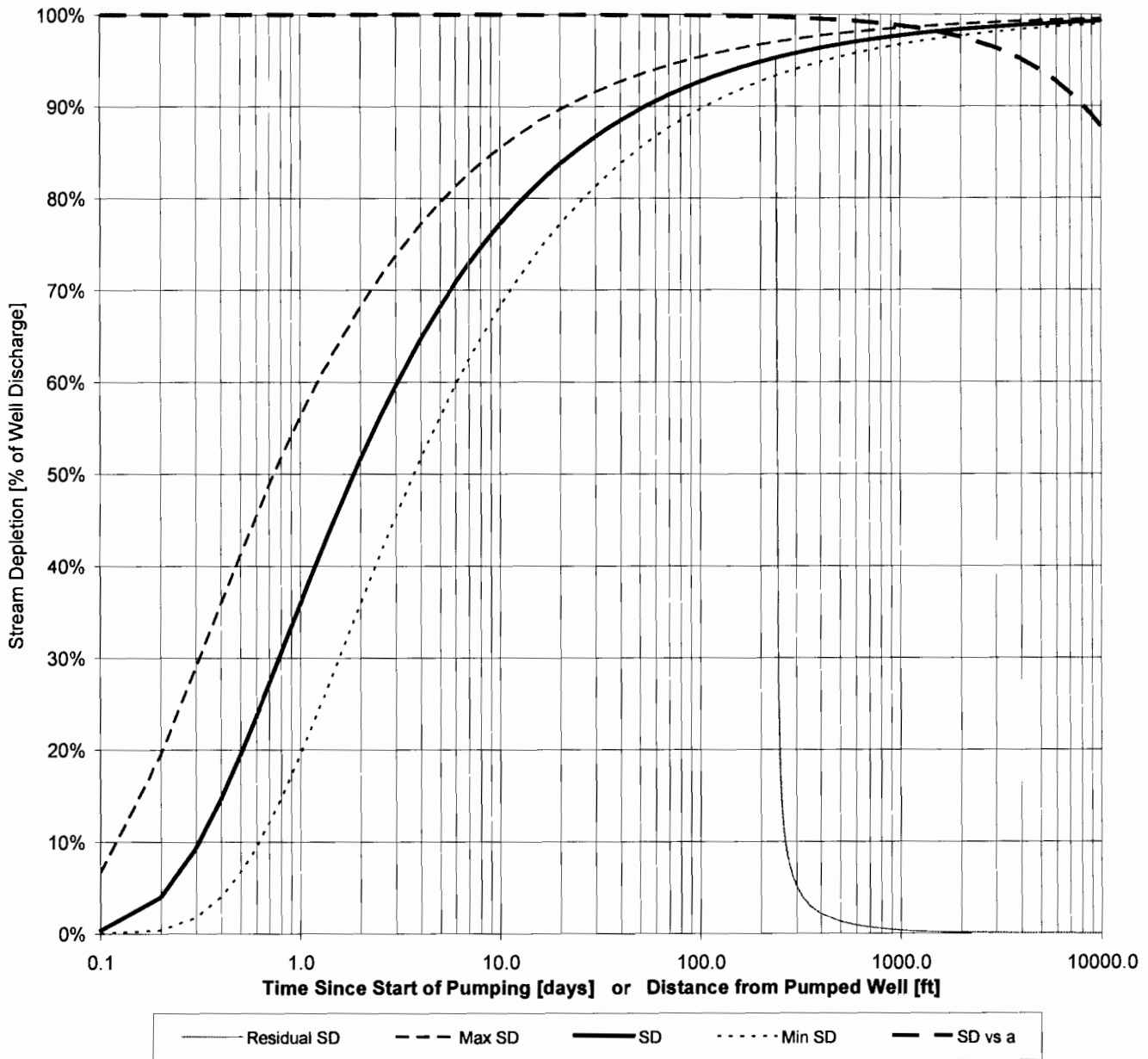
D8. **Route to Water Rights Section (attach well reconstruction logs to this page).**

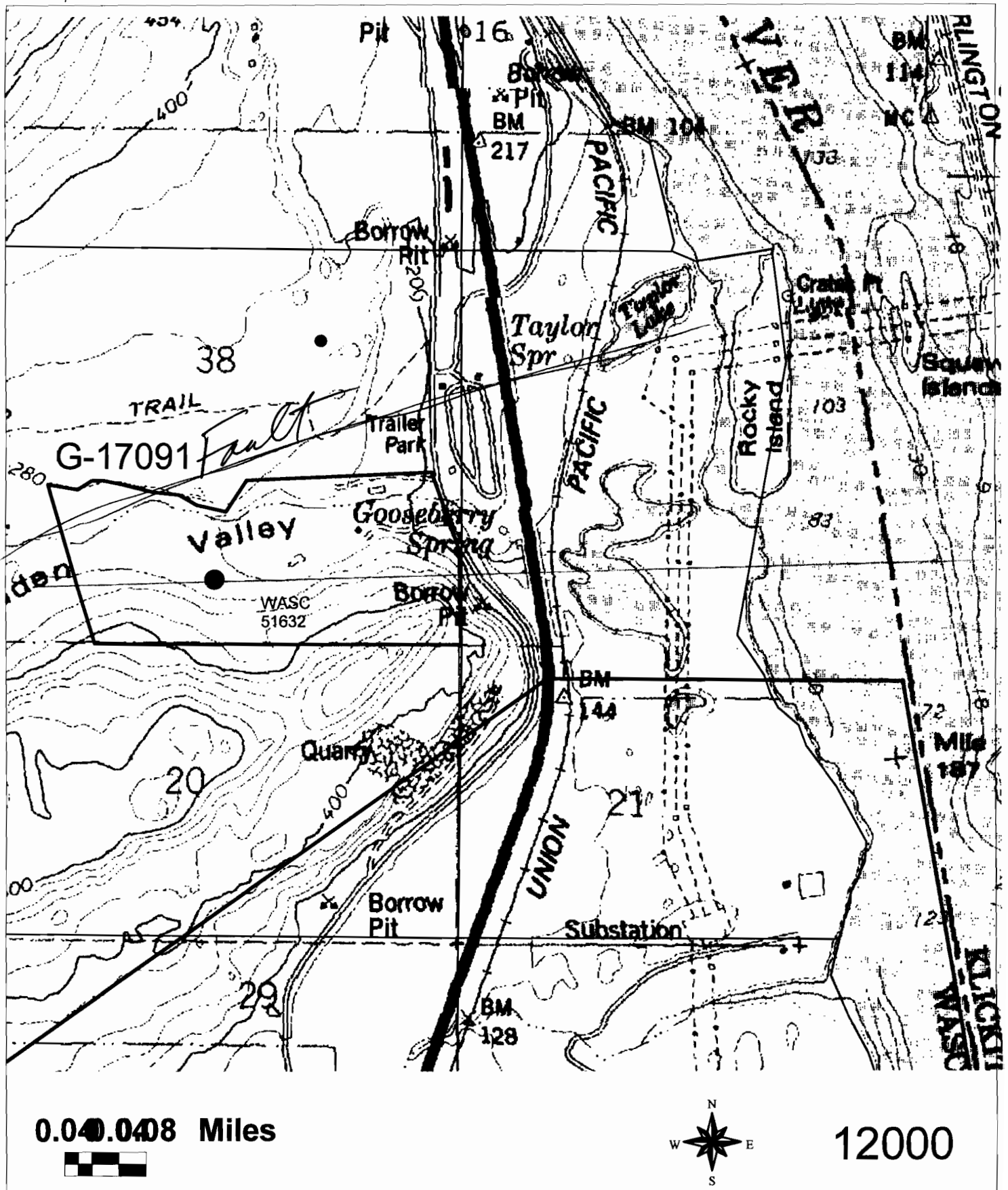
Q = 200 gpm K Max = 500 gpd/ft*ft
 a = 3860 ft K = 200 gpd/ft*ft
 S = 0.0001 K Min = 100 gpd/ft*ft
 t = 240.00 days

G-17091

T Max = 16,500 gpd/ft
 T = 6,600 gpd/ft
 T Min = 3,300 gpd/ft

Transient Stream Depletion = 95% at t = 240.00 days





GROUND WATER APPLICATION g-17091 - WEBB
 WASCO COUNTY, THE DALLES NORTH QUAD

Water Availability Analysis

GOOSEBERRY CR> COLUMBIA R- AT MOUTH
HOOD BASIN

Water Availability as of 10/31/2008

Watershed ID #: 30410532

Exceedance Level: 80%

Date: 10/31/2008

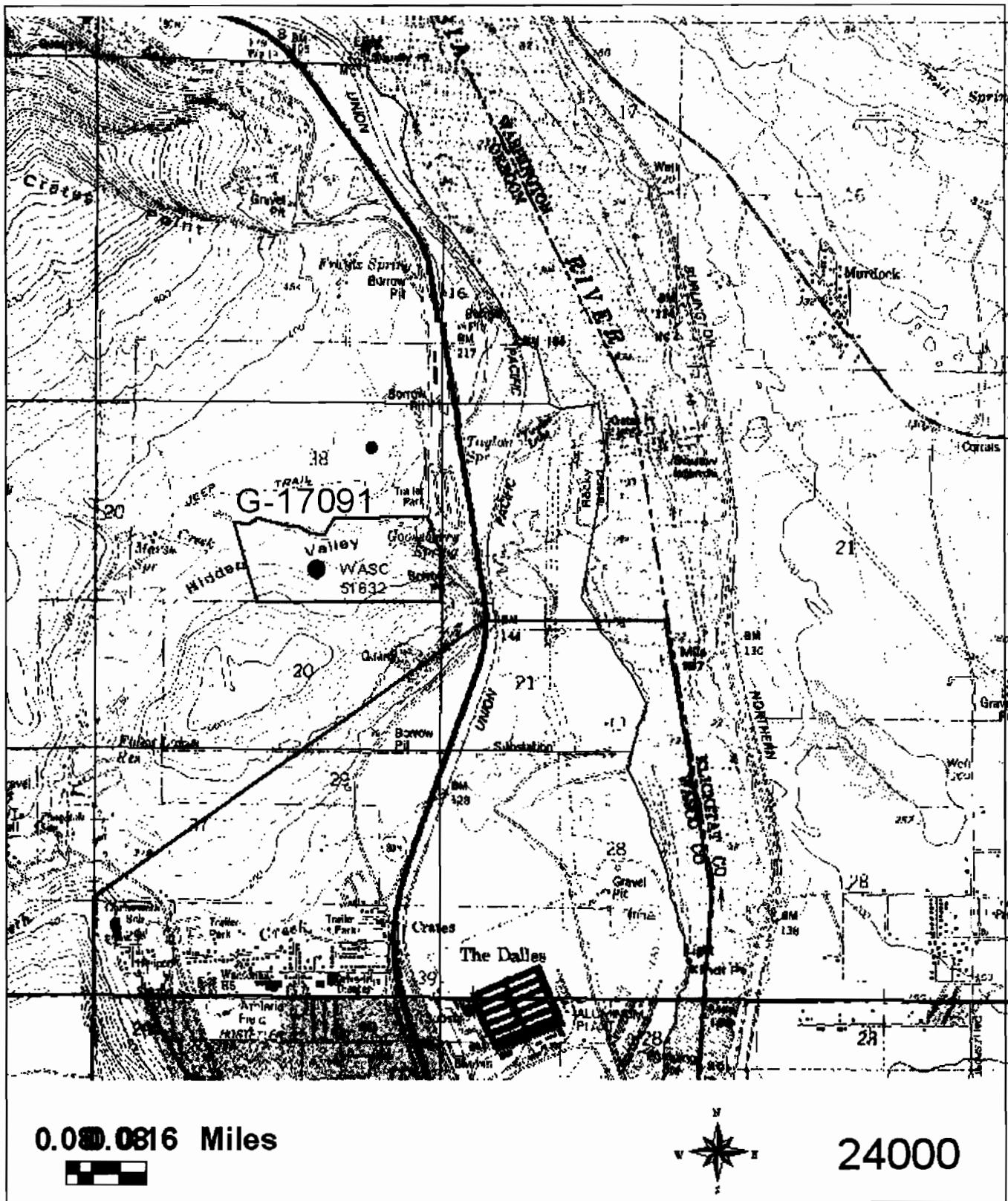
Time: 10:33 AM

Water Availability | Limiting Watersheds | Complete Water Availability Analysis

Water Availability

Select any Watershed for Details

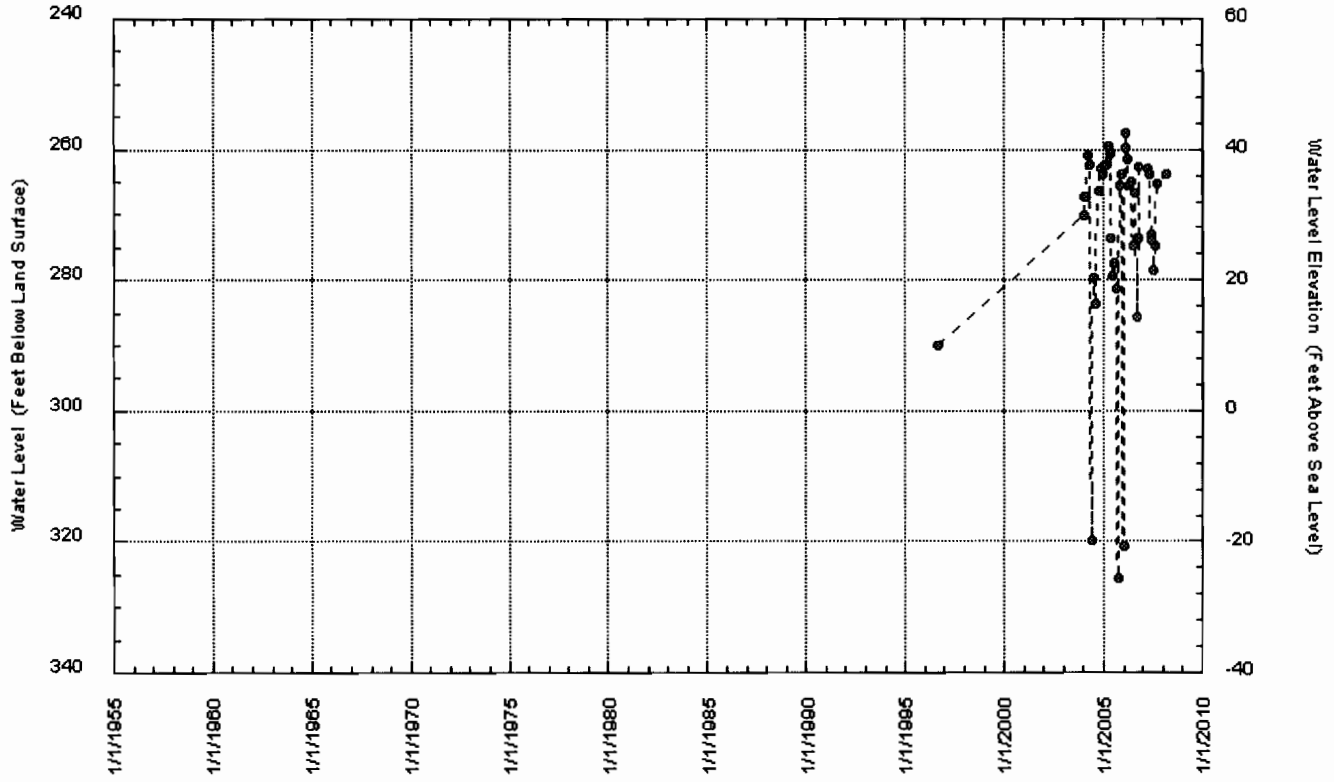
	Nesting Order	Watershed ID #	Stream Name	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Sto
<u>Select</u>	1	30410532	GOOSEBERRY CR> COLUMBIA R- AT MOUTH	Yes	Yes	Yes	No	No	No	No	No	No	No	No	No	Yes



GROUND WATER APPLICATION g-17091 - WEBB
WASCO COUNTY, THE DALLES NORTH QUAD

Discovery Center Well
Lithology: basalt
Aquifer: CRB
Land surface elevation: 300'
Well Depth: 603'

GROUND WATER STUDY NEAR THE DALLES OWRD LOGID WASC 50145 02N/13E-20



WEST

EAST

400

300

200

100

-100

-200

WASC
51632

Alluvial

Black
Hard
Basalt

Basalt
Hard
gray

Basalt Frag.
Vesicular
Blane

Basalt Frag.
Green seams

Basalt
Broken
Black

124'

194' W.L. (2/25/08)

209

251

283

WB

found water

FREEWAY

POND

72' Columbia River

STATE OF OREGON

WATER SUPPLY WELL REPORT

(as required by ORS 537.765 & OAR 690-205-0210)

03-20-2008

WELL LABEL # L 78918

START CARD # 1002583

(1) LAND OWNER Owner Well I.D.
First Name ROCK Last Name WEBB
Company
Address 3825 CHERRY HEIGHTS ROAD
City THE DALLES State OR Zip 97058

(2) TYPE OF WORK [X] New Well [] Deepening [] Conversion
[] Alteration (repair/recondition) [] Abandonment

(3) DRILL METHOD
[X] Rotary Air [] Rotary Mud [] Cable [] Auger [] Cable Mud
[] Reverse Rotary [] Other

(4) PROPOSED USE [] Domestic [X] Irrigation [] Community
[] Industrial/ Commercial [] Livestock [] Dewatering
[] Thermal [] Injection [] Other

(5) BORE HOLE CONSTRUCTION Special Standard [] (Attach copy)
Depth of Completed Well 315.00 ft.

Table with columns: Dia, From, To, Material, SEAL, Amt, lbs. Contains data for cement seal at 124 and 315 feet.

How was seal placed: Method [X] A [] B [] C [] D [] E
[] Other

Backfill placed from ft. to ft. Material

Filter pack from ft. to ft. Material Size

Explosives used: [] Yes Type Amount

(6) CASING/LINER Table with columns: Casing, Liner, Dia, From, To, Gauge, Stl, Plstc, Wld, Thrd. Includes a diagram of casing connections.

Shoe [] Inside [X] Outside [] Other Location of shoe(s) 124

Temp casing [] Yes Dia From To

(7) PERFORATIONS/SCREENS
Perforations Method
Screens Type Material

Table with columns: Perf/S, Casing/Screen, Dia, From, To, Scrm/slot width, Slot length, # of slots, Tele/pipe size.

(8) WELL TESTS: Minimum testing time is 1 hour

[] Pump [] Bailer [X] Air [] Flowing Artesian

Table with columns: Yield gal/min, Drawdown, Drill stem/Pump depth, Duration (hr). Contains data: 120, 314, 1.

Temperature 58 °F Lab analysis [] Yes By

Water quality concerns? [] Yes (describe below)

Table with columns: From, To, Description, Amount, Units.

(9) LOCATION OF WELL (legal description)

County Wasco Twp 2.00 N N/S Range 13.00 E E/W WM
Sec 20 SW 1/4 of the NE 1/4 Tax Lot 300
Tax Map Number Lot
Lat " or DMS or DD
Long " or DMS or DD
[] Street address of well [X] Nearest address

ACROSS FROM 4405 HWY 30 WEST THE DALLES OR 97058

(10) STATIC WATER LEVEL

Table with columns: Existing Well / Predeepening, Date, SWL(psi), SWL(ft). Contains data for 02-25-2008 with SWL of 194.

WATER BEARING ZONES Depth water was first found 22

Table with columns: SWL, Date, From, To, Est Flow, SWL(psi), SWL(ft). Contains data for 12-20-2007 and 02-25-2008.

(11) WELL LOG

Table with columns: Material, From, To. Lists soil and rock layers such as SAND, ROCK BROKEN, BASALT BLACK, etc.

Date Started 12-17-2007 Completed 02-25-2008

(unbonded) Water Well Constructor Certification

I certify that the work I performed on the construction, deepening, alteration, or abandonment of this well is in compliance with Oregon water supply well construction standards.

License Number Date

Electronically Filed

Signed

(bonded) Water Well Constructor Certification

I accept responsibility for the construction, deepening, alteration, or abandonment work performed on this well during the construction dates reported above.

License Number 790 Date 03-20-2008

Electronically Filed

Signed CHARLES W AUSTIN (E-filed)

Contact Info (optional)