

Water Right Conditions Tracking Slip

Groundwater/Hydrology Section

FILE # # G-17871

ROUTED TO: Water Rights

TOWNSHIP/
RANGE-SECTION: 13S/9E-15

CONDITIONS ATTACHED?: yes no

REMARKS OR FURTHER INSTRUCTIONS:
w/in Deschutes GW Study
Area

Reviewer: K. Lite

WATER RESOURCES DEPARTMENT

MEMO

July 9, 2014

TO: Application G- 17871

FROM: GW: K. Lite
(Reviewer's Name)

**SUBJECT: Scenic Waterway Interference & General/Local Surface Water
Evaluation for Deschutes Ground Water Study Area**

The source of appropriation is within or above the Deschutes Scenic Waterway

Use the Scenic Waterway condition (Condition 7J).

PREPONDERANCE OF EVIDENCE FINDING UNDER ORS 390.835:

Department has found that there is a preponderance of evidence that the proposed use of ground water will measurably reduce the surface water flows necessary to maintain the free-flowing character of the Deschutes Scenic Waterway in quantities necessary for recreation, fish and wildlife.

LOCALIZED IMPACT FINDING

The proposed use of ground water will have a localized impact to surface water in the Metolius River/Creek Subbasin.

If the localized impact line above is checked, then the water use under any right issued pursuant to this application is presumed to have a localized impact on surface water within the identified subbasin. Mitigation of the impact, originating from within the Local Zone of Impact identified by the Department, will be required before a permit may be issued for the proposed use.

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.

PUBLIC INTEREST REVIEW FOR GROUND WATER APPLICATIONS

TO: Water Rights Section Date 7/9/2014
 FROM: Ground Water/Hydrology Section K. Lite
Reviewer's Name
 SUBJECT: Application G- 17871 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: Lake Creek Lodge County: Jefferson

A1. Applicant(s) seek(s) 0.16 cfs from 3 well(s) in the Deschutes Basin,
Metolius subbasin Quad Map: Black Butte

A2. Proposed use: Commercial & Irrigation Seasonality: Year-Around & Apr 1 - Oct 31

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	Jeff 620	1	Glaciofluvial	0.04	13S/9E-15BCB	1128' N, 94' E fr W1/4 cor, S 15
2	Jeff 50790**	2	Glaciofluvial	0.04	13S/9E-15BCB	929' N, 212' E fr W1/4 cor, S 15
3	Jeff 51052	3	Glaciofluvial	0.08	13S/9E-15BCD	405' N, 674' E fr W1/4 cor, S 15
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	2985	15	15	10/25/74	60	0-20	+1-59		29-59	15	5	B
2	2980				65							
3	2985	15	7	09/26/14	92	0-40	+1.5-91.5		75-88	75		A

Use data from application for proposed wells.

A4. **Comments: WELLS ARE CONSTRUCTED INTO OUTWASH SEDIMENTS. ** ONLY WELL IDENTIFICATION FORM. REGIONAL GROUND-WATER FLOW IS TOWARDS THE METOLIUS RIVER GROUND-WATER LEVEL IS LIKELY BELOW THE NEAREST REACHES OF LAKE CREEK. THE CLOSEST LIKELY DOWN-GRADIENT GROUNDWATER DISCHARGE IS AT LOWER REACHES OF LAKE CREEK AND TRIBUTARY SPRINGS TO THE METOLIUS RIVER. WELLS ARE LOCATED WITHIN THE DESCHUTES GROUND WATER STUDY AREA**

A5. **Provisions of the Deschutes** 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: Within USGS Study Area Boundary.

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

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) 7B;
 - 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 NEAREST OBSERVATION WELL IS STATE OBS WELL 1366 (JEFF 50984), ABOUT 2.3 MILES TO THE NORTH-NORTHEAST. IT HAS BEEN MONITORED PERIODICALLY SINCE 2006. OBSERVATION WELL 1366 APPEARS TO BE IN DYNAMIC EQUILIBRIUM. THE LONG-TERM TREND SHOWS A DECADEAL-SCALE WATER LEVEL FLUCTUATION THAT IS COINCIDENT WITH CLIMATE CYCLES. THE DECADEAL FLUCTUATION HAS A MAXIMUM AMPLITUDE OF APPROXIMATELY 1- FOOT. PRIOR TO 2006, WATER LEVEL MEASUREMENTS WERE TAKEN AT WELL 1304. WELL 1304 WAS ABANDONED IN 2006, AND WAS REPLACED BY (SIMILARLY CONSTRUCTED) WELL 1366 LOCATED APPROXIMATELY 20 FEET AWAY.

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: _____

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: _____

D. WELL CONSTRUCTION, OAR 690-200

D1. Well #: 1-3 Logid: JEFF 620, JEFF 50790, AND JEFF 51052

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

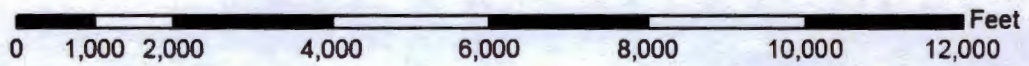
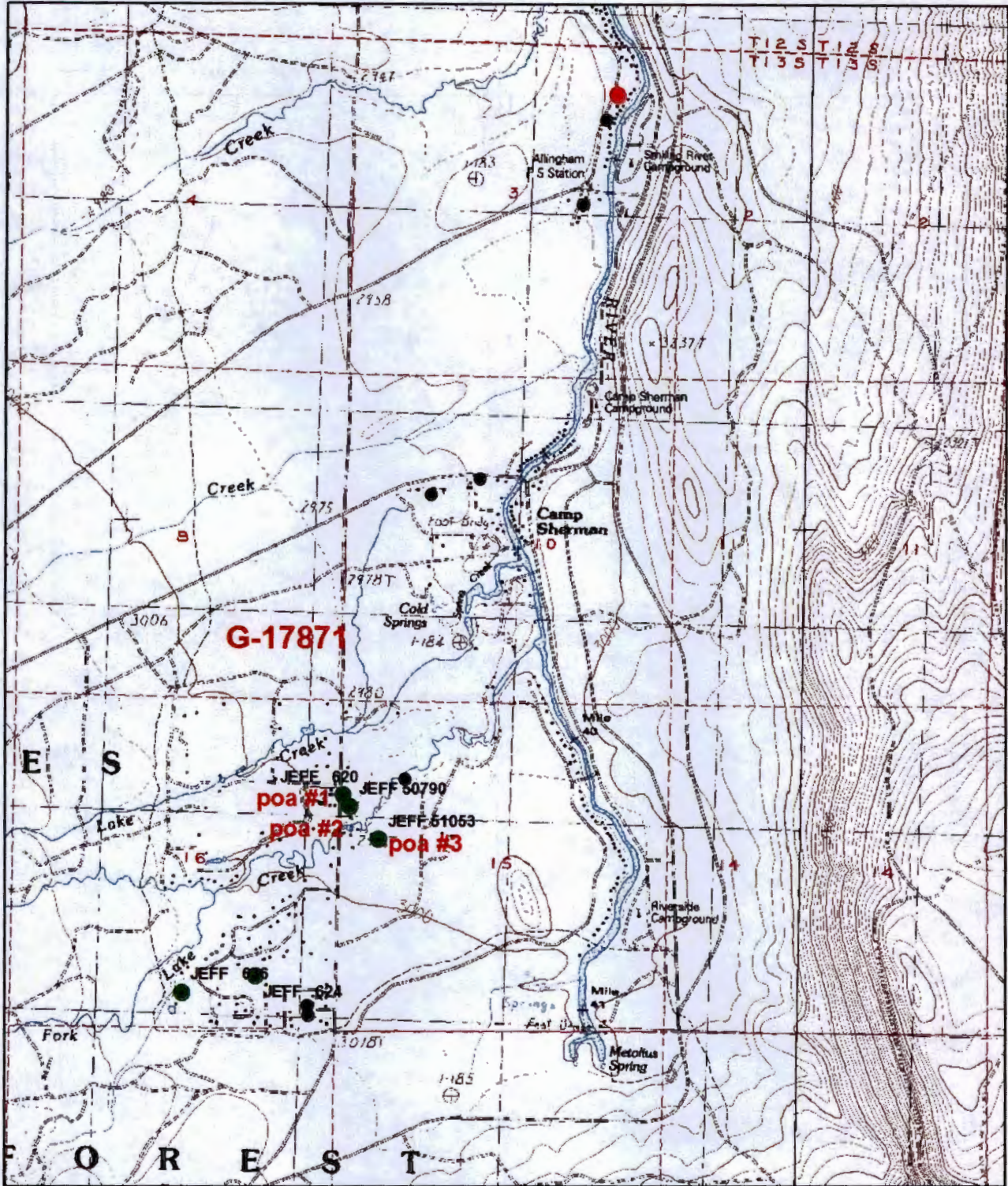
D7. Well construction deficiency has been corrected by the following actions: _____

_____, 200____.

(Enforcement Section Signature)

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

G-17871: Black Butte and Little Squaw Back Quadrangles



Oregon Water Resources Department (OWRD) Well Location

13.00S/9.00E-3

OWRD Logid

JEFF 50984

OWRD Well Tag (Well ID)

OWRD State Observation Well Number

1366

Total well depth (feet below land surface)

112

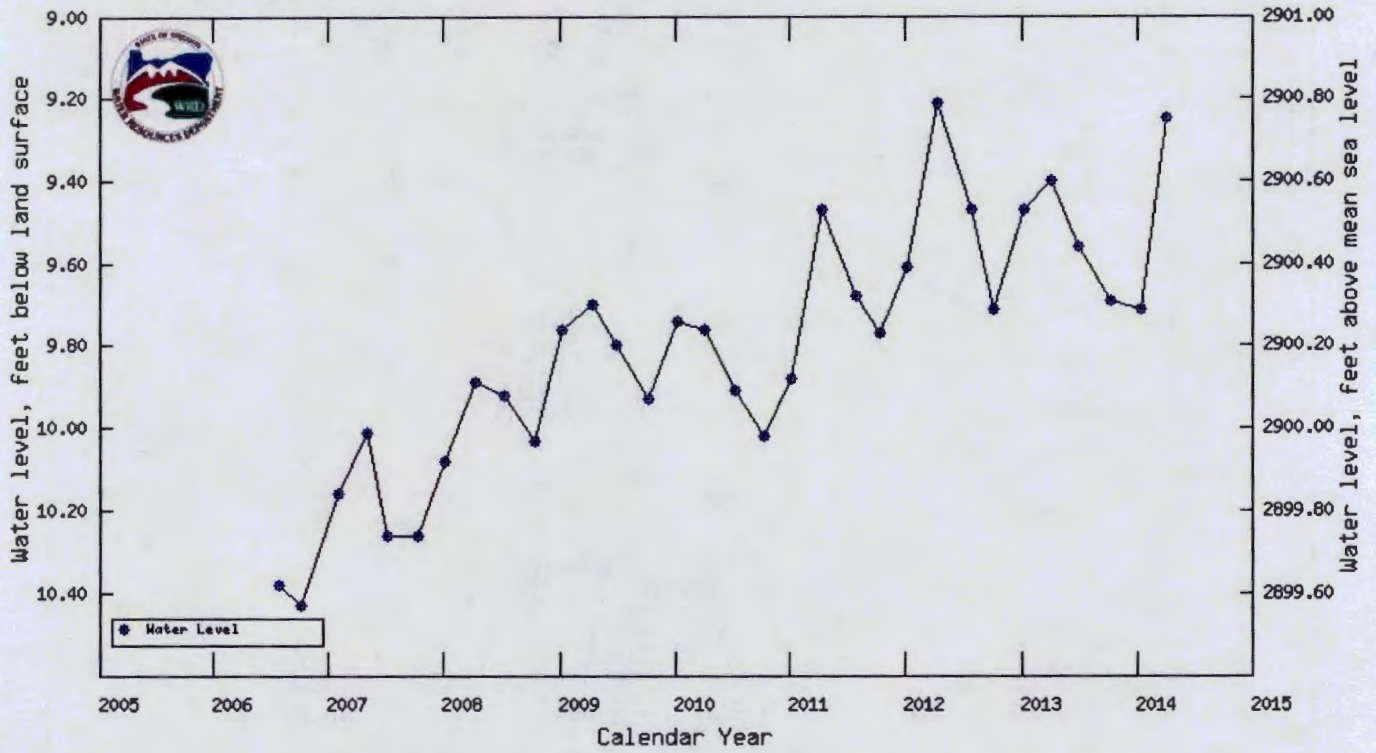
Land surface elevation (feet above mean sea level)

2910

Primary use of well

DOMESTIC

Primary aquifer system



Oregon Water Resources Department (OWRD) Well Location

13.00S/9.00E-3aac2

OWRD Logid

JEFF 129

OWRD Well Tag (Well ID)

OWRD State Observation Well Number

1304

Total well depth (feet below land surface)

110

Land surface elevation (feet above mean sea level)

2910

Primary use of well

ABANDONED

Primary aquifer system

