Groundwater Application Review Summary Form

Application # G- 18618

GW Reviewer Aurora Bouchier **Date Review Completed:** 4/30/2018

Summary of GW Availability and Injury Review:

[ ] Groundwater for the proposed use is either over appropriated, will not likely be available in the amounts requested without injury to prior water rights, OR will not likely be available within the capacity of the groundwater resource per Section B of the attached review form.

Summary of Potential for Substantial Interference Review:

[ ] There is the potential for substantial interference per Section C of the attached review form.

Summary of Well Construction Assessment:

[ ] The well does not appear to meet current well construction standards per Section D of the attached review form. Route through Well Construction and Compliance Section.

This is only a summary. Documentation is attached and should be read thoroughly to understand the basis for determinations and for conditions that may be necessary for a permit (if one is issued).

MEMO

To: Kristopher Byrd, Well Construction and Compliance Section Manager

From: Joel Jeffery, Well Construction Program Coordinator

Subject: Review of Water Right Application G-18618

Date: September 27, 2018

The attached application was forwarded to the Well Construction and Compliance Section by Water Rights. Aurora Bouchier reviewed the application. Please see Aurora's Groundwater Review and the Well Log.

Applicant's Well #1 (DESC 765): Based on a review of the Well Report, Applicant's Well #1 appears to protect the groundwater resource.

The construction of Applicants Well #1 may not satisfy hydraulic connection issues.

amended 9/27/18
DESC 765

DESC 765

APR 24 1991 FEB 11 1991

15S/12E/36 ad

STATE OF OREGON

WATER WELL REPORT

(as required by ORS 537.765)

WATER RESOURCES DEPT SALEM, OREGON WATER RESOURCES DEPT SALEM, OREGON

(START CARD) # 27901

(1) OWNER:

Well Number:

Name teekree larson

Address 19910 Pine Lane

City Bend, OR State Zip 97701

(2) TYPE OF WORK:

☒ New Well ☐ Deepen ☐ Recondition ☐ Abandon

(3) DRILL METHOD

☒ Rotary Air ☐ Rotary Mud ☐ Cable

☐ Other

(4) PROPOSED USE:

☐ Domestic ☐ Community ☐ Industrial ☒ Irrigation

☐ Thermal ☐ Injection ☐ Other

5) BORE HOLE CONSTRUCTION:

Special Construction approval Yes ☐ No ☐ Depth of Completed Well 451 ft.

Explosives used Yes ☐ No ☐ Type Amount

HOLE Diameter	From	To	SEAL Material	From	To	Amount sacks or pounds
12"	0	18'6"	Bentonite	0	18'6"	10
10"	18'6"	to 451'				

How was seal placed: Method ☐ A ☐ B ☐ C ☐ D ☐ E

☐ Other Poured Dry

Backfill placed from ft. to ft. Material

Gravel placed from ft. to ft. Size of gravel

(6) CASING/LINER:

	Diameter	From	To	Gauge	Steel	Plastic	Welded	Threaded
Casing:	8"	+2	18'6"	.250	☒	☐	☒	☐
Liner:	7"	+2	451'	.188	☒	☐	☒	☐
					☐	☐	☐	☐
					☐	☐	☐	☐
Other					☐	☐	☐	☐
					☐	☐	☐	☐

Final location of shoe(s)

7) PERFORATIONS/SCREENS:

☒ Perforations Method Factory Perfect

☐ Screens Type Material

From	To	Slot size	Number	Diameter	Tele/pipe size	Casing	Liner
390	450	1/8"	60	3"		☐	☐
						☐	☐
						☐	☐
						☐	☐
						☐	☐
						☐	☐

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

☒ Pump ☐ Bailer ☐ Air ☐ Flowing Artesian

Yield gal/min	Drawdown	Drill stem at	Time
50	0	446	1 hr.
			Blow test

Temperature of water 56° Depth Artesian Flow Found

Was a water analysis done? ☐ Yes By whom

Did any strata contain water not suitable for intended use? ☐ Too little

☐ Salty ☐ Muddy ☐ Odor ☐ Colored ☐ Other

Depth of strata:

(9) LOCATION OF WELL by legal description:

County Deschutes Latitude Longitude

Township 15 S N or S. Range 12 E E or W. WM.

Section 36 SE ¼ NE ¼

Tax Lot 406 Lot Block Subdivision

Street Address of Well (or nearest address) 5310 SW Harvest Lr Redmond, OR

(10) STATIC WATER LEVEL:

390 ft. below land surface. Date 2-1-91

Artesian pressure 0 lb. per square inch. Date 2-1-91

(11) WATER BEARING ZONES:

Depth at which water was first found 390

From	To	Estimated Flow Rate	SWL
390	451		358

(12) WELL LOG:

Ground elevation

Material	From	To	SWL
Top Soil	0	3	
Broken Gray Basalt	3	12	
Hard Gray Basalt	12	22	
Medium Gray Baswalt	22	85	
Broken Sandstone	85	130	
Medium Gravel	130	142	
Broken Basalt	142	177	
Hard Broken Br Basalt	177	189	
Medium Hard BrownBasalt	189	229	
Hard Brown Clay	229	309	
Brown Sandstone	309	389	
Dark Brown Sand (fine)	389	395	
Sandstone w/clay	395	426	
Brown Sand& Conglomerate (fine)	426	440	
Hard Brown Clay	440	451	

Date started 1-7-91 Completed 2-1-91

(unbonded) Water Well Constructor Certification:

I certify that the work I performed on the construction, alteration, or abandonment of this well is in compliance with Oregon well construction standards. Materials used and information reported above are true to my best knowledge and belief.

Signed Robert Bucker WWC Number 1385 Date 2-6-91

(bonded) Water Well Constructor Certification:

I accept responsibility for the construction, alteration, or abandonment work performed on this well during the construction dates reported above. all work performed during this time is in compliance with Oregon well construction standards. This report is true to the best of my knowledge and belief.

Signed Robert Bucker WWC Number 1385 Date 2-6-91

ORIGINAL & FIRST COPY - WATER RESOURCES DEPARTMENT SECOND COPY - CONSTRUCTOR THIRD COPY - CUSTOMER 9809C 3/85

DESC 765

Oregon Water Resources Department
725 Summer Street NE, Suite A
Salem Oregon 97301
(503) 986-0900
www.wrd.state.or.us

Application for Well ID Number

RECEIVED
MAY 11 2016
WATER RESOURCES DEPT
SALEM, OREGON

Do not complete if the well already has a Well Identification Number.

I. OWNER INFORMATION

Current Owner Name *(please print)*: TEEKREE PARRISH

Mailing Address: 5310 SW HARVEST LN

City, State, Zip: REDMOND OR 97756

Mail Well ID Tag to: ☒ SAME AS ABOVE ☐ In Care Of (C/O)

Name & Address:

City, State, Zip:

II. WELL LOCATION INFORMATION *(Please fill out as completely as possible)*

Township: 15 S (North / South) Range: 12 E (East / West) Section: 36 SE 1/4 of the NE 1/4

Tax Lot (usually last 3-5 numbers of Tax Map #): 406 County DESCHUTES

GPS Coordinates:

Street Address of Well, City: SAME AS ABOVE

If the property had a different street address in the past:

III. GENERAL WELL INFORMATION *(Please fill out as completely as possible, AND attach copy of Well Log, if available)*

Use of Well (domestic, irrigation, commercial, industrial, monitoring): IRRIGATION

Date Well Constructed (or property built): 2/1/1991 Total Well Depth: 451' Casing Diameter: 8"

Owner at time the well was constructed (if known): SAME (WAS LARSON) Well Log # (if known): DESC 765

Other Information:

SUBMITTED BY *(please print)*: TEEKREE PARRISH (VIA PHONE)

PHONE: 541-516-8684 **EMAIL &/or FAX:**

Send application to: Oregon Water Resources Department 725 Summer St NE, Suite A, Salem, Oregon 97301; or fax to (503) 986-0902. Applications are processed in the order they are received, and Well ID Numbers are mailed within 4-5 business days.

For Official Use Only by the Oregon Water Resources Department:

Received Date:	Well Log Number:	Well Identification #:
5-11-16	DESC 765	L-122907

DGWSA IR CHECKLIST

App G-18618

✓ Requested Use/Rate/Season IR 12 gpm (0.027 cfs) 4/1 – 11/1

✓ Allowed Use/Rate/Season IR 12 gpm (0.027 cfs) 4/1 – 11/1 Limit _____ Duty

✓ Check Allocation Cap status. Is water available? ☒ Yes ☐ No (if no, deny)
S:\groups\fs\programs\deschutes basin gw mitigation\Dept accounting and tracking

✓ Div 9 ☐ will likely be available... ☐ will not likely be available... ☒ will, if properly conditioned...

well _____ has PSI with _____

GW conditions 7N, 7S

✓ Other Conditions: (Not DGWSA conditions) _____
Large-totalizing on all apps

✓ Zone of Impact MIDDLE DESCHUTES RIVE Mitigation Obligation 3.6 acre-feet
(single number after decimal – ex- 9.2)

✓ Mitigation Factor reference link
S:\groups\wr\Resource Center\DGWSA_DESCHUTES RELATED\mit oblig fact sheet and example calculation.doc

Irrigation:	1.8(AF) x 2.0	Acres = 3.6	MO
MU or QM:	0.40 x	AF (average peak volume) =	MO
Storage or PM:	2.67(AF) x	Acres (surface area) =	MO
*Industrial:	0.10 x	AF (total volume)=	MO
Commercial:	0.15 x	AF (total volume)=	MO
Agriculture:	0.5 x	AF (total volume)=	MO
Dust Abatement:	1.0 x	AF (total volume)=	MO
*Nursery Use:	0.5/1.0 x	AF (total volume)=	MO

***Verify how water is being used to determine appropriate consumptive use factor.**

Mitigation Obligation Caclulation Examples:

IRRIGATION: 6.5 (acres) x 1.8(AF) = 11.7 AF total mitigation obligation.

STORAGE OR POND MAINTENANCE: 2.67 AF x 6.25 acres of surface area = 16.7 AF of mitigation obligation for storage

INDUSTRIAL AND COMMERCIAL USES: The mitigation obligations are based on volume.

COMMERCIAL USE: 800 AF x 0.15 = 120 AF total mitigation obligation.

*INDUSTRIAL USE: 800 AF x 0.10 = 80 AF total mitigation obligation.

MUNICIPAL AND QUASI-MUNICIPAL: 40% consumptive. They will mitigate for the average peak volume (see From M).

7500 AF x .40 = 3000 AF total mitigation obligation.

NOTE: Watch for the proposed use of water within a Qmuni application. If they're proposing a golf course, or a large percentage of the use will be for agriculture or irrigation, it is good to dialogue with them to determine if a mitigation obligation reflecting both a Muni/Qmuni rate and an irrigation rate is more appropriate. It will not change the language of a permit, only the amount of mitigation needed. (See G-16385 for an example of a Q-muni with irrigation)

AGRICULTURE: The consumptive factor for agriculture use is 50%.

*NURSERY USE: If total volume is greater than **1.8 AF per acre**, the consumptive factor is 50%. If total volume is less than **1.8 AF per acre**, consumptive factor is 100% (1:1).

✓ POU conflict ☒ NA ☐ No ☐ No, different sources ☐ No, make up a deficiency in rate

☐ Yes _____

✓ Use is supplemental, checked for primary rights ☒ NA ☐ Yes limits _____

✓ Land use ☐ allowed outright ☐ not allowed ☐ being pursued ☐ not being pursued ☒ decision obtained ☐ receipt only ☐ N/A

✓ MU or QM ☒ NA ☐ will complete const within 20 years ☐ WMCP review done - recommendations _____

✓ Authorized agent specified ☐ NA ☐ needed ☒ Yes John Short

✓ Copy to ☒ WM #11 ☒ agent ☐ CWRE ☐ a.l.o. ☐ DOA Food Safety Division (bottled water)

Attach ☒ Desc Mit Rules -S:\groups\wr\Resource Center\DGWSA_DESCHUTES RELATED\forms\mitigation rules
☒ NOMO
☐ other

Fees _____ CFS Base 1340

_____ AF Up to 1 CFS 350

_____ Add'l CFS _____

_____ well(s)/POD(s) Up to 20 AF _____

_____ Add'l AF @ $1 _____

_____ use(s)

_____ Add'l AF @ $1 _____

Add'l _____ POD/POA _____ use + _____ Mit Fee Req'd $670

Exam Fee Required 1690 Rec Fee Req'd $520

Exam Fee Paid 1690 Red Fee Paid 1190

Still Owed Ø Owed before permit Ø

✓ App/map meet min. req ☒ Yes ☐ No ☐ ALO info ☐ map ☐ legal
(If not, send IR certified)

✓ Req'd before PFO ☐ NA ☐ LU approve/pursue ☐ ALO info ☐ fees ☒ NOMO

✓ Req'd before permit ☐ NA ☐ well repair ☐ LU ☐ easement ☒ mitigation ☐ fees

✓ Scanned images exist for application form and map

Name: Scott Date: 5/16/18 Peer Reviewer: Lisa G 5.18.18

The purpose of this checklist is to be used as a working document by Department staff to aid in the production of the related Initial Review, Proposed Final Order, or Final Order. It is not intended to be a complete record of all factors which were considered to produce the document, nor is it intended to serve any purpose other than that stated above. The related Initial Review, Proposed Final Order, or Final Order is intended to stand alone as the record of factors considered in its production.

Print Form

WATER RESOURCES DEPARTMENT

MEMO

Date: April 30, 2018

TO: Application: 18618

FROM: GW: Aurora Bouchier
(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 _____ River/Creek Subbasin.

If the localized impact box 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 box 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 GROUNDWATER APPLICATIONS

TO: Water Rights Section Date 4/30/2018

FROM: Groundwater Section Aurora C Bouchier
Reviewer's Name

SUBJECT: Application G- 18618 Supersedes review of na
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 groundwater 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: **Teekree A. Parris** County: **Deschutes**

A1. Applicant(s) seek(s) 0.027 cfs from 1 well(s) in the Deschutes Basin, Upper Deschutes (General Zone) subbasin (Forked Horn Butte)

A2. Proposed use Irrigation (2.0 acres) Seasonality: Irrigation Season

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	DESC 765	1	Deschutes Fm	0.027	15S/12E-36 SE-NE	240; N, 825' W fr ¼ cor S 36
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	3113	390	390	2/1/1991	451	0-18.5	-2-18.5	-2-451	390-451	50	Na	B

Use data from application for proposed wells.

A4. **Comments:** The well is constructed into water bearing zones within the Deschutes Fm. Groundwater flow is towards the north-northeast. The water level in the well is below the Deschutes River at the nearest reach. The nearest likely discharge area is near Lake Billy Chinook. The well is located within the USGS Groundwater Study Area and subject to Division 690-505-0500 to 0620.

A5. ☒ **Provisions of the** Deschutes Basin rules relative to the development, classification and/or management of groundwater hydraulically connected to surface water ☒ **are**, *or* ☐ **are not**, activated by this application. (Not all basin rules contain such provisions.)
Comments: Located within the USGS Groundwater Study Area.

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

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

B1. **Based upon available data**, I have determined that groundwater* 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 groundwater 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 groundwater 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 groundwater resource; or

d. ☒ **will, if properly conditioned**, avoid injury to existing groundwater rights or to the groundwater resource:
   i. ☒ The permit should contain condition #(s) **7N, 7J**;
   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 groundwater production from no deeper than _____ ft. below land surface;

b. ☐ **Condition** to allow groundwater production from no shallower than _____ ft. below land surface;

c. ☐ **Condition** to allow groundwater production only from the _____ groundwater 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 Groundwater 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. **Groundwater availability remarks:** _____

The nearest observation wells with similar well depths recently monitored are DESC 5045 (located approximately 9.5 miles to the south-southwest in Bend) and DESC 3949 (located approximately 3.6 miles to the northeast in Redmond – NOTE: this well was abandoned in July 2016). These wells have been measured periodically since the 1970's. The water level trend for these two observation wells and other wells between Bend and Redmond with similar well construction depths show a declining water level of approximately 10-feet per decade since the early 1990's. The declining water levels have been attributed to decreased recharge (the dominant factor accounting for approximately 60-70% of the measured decline) and increased pumping (accounting for 20-30% of the measured decline) (Gannett and Lite, 2013).

C. GROUNDWATER/SURFACE WATER CONSIDERATIONS, OAR 690-09-040

C1. **690-09-040 (1):** Evaluation of aquifer confinement:

Well	Aquifer or Proposed Aquifer	Confined	Unconfined
		☐	☐
		☐	☐
		☐	☐
		☐	☐
		☐	☐

Basis for aquifer confinement evaluation: _____

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
						☐	☐	☐	☐	☐
						☐	☐	☐	☐	☐
						☐	☐	☐	☐	☐
						☐	☐	☐	☐	☐
						☐	☐	☐	☐	☐
						☐	☐	☐	☐	☐
						☐	☐	☐	☐	☐
						☐	☐	☐	☐	☐
						☐	☐	☐	☐	☐

Basis for aquifer hydraulic connection evaluation: _____

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

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?
		☐	☐			☐		☐		☐
		☐	☐			☐		☐		☐
		☐	☐			☐		☐		☐
		☐	☐			☐		☐		☐
		☐	☐			☐		☐		☐
		☐	☐			☐		☐		☐
		☐	☐			☐		☐		☐
		☐	☐			☐		☐		☐

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?
			☐			☐		☐		☐
			☐			☐		☐		☐
			☐			☐		☐		☐
			☐			☐		☐		☐

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													
		%	%	%	%	%	%	%	%	%	%	%	%
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 groundwater 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:

Application file: G-18618.

Gannett, Marshall W., Lite, Kenneth E. Jr., Morgan, David S., and Collins, Charles A., 2001, Ground-Water Hydrology of the Upper Deschutes Basin, Oregon: U.S. Geological Survey Water-Resources Investigations Report 00-4162.

Gannett, Marshall W., and Lite, Kenneth E. Jr., 2013, Analysis of 1997-2008 Groundwater Level Changes in the Upper Deschutes Basin, Central Oregon: U.S. Geological Survey Scientific Investigations Report 2013-5092.

Lite, Kenneth E. Jr., and Gannett, Marshall W., 2002, Geologic Framework of the Regional Ground-Water Flow System in the Upper Deschutes Basin, Oregon: U.S. Geological Survey Water-Resources Investigations Report 02-4015.

OWRD water levels and well log database.

D. WELL CONSTRUCTION, OAR 690-200

D1. **Well #:** _____ **Logid:** _____

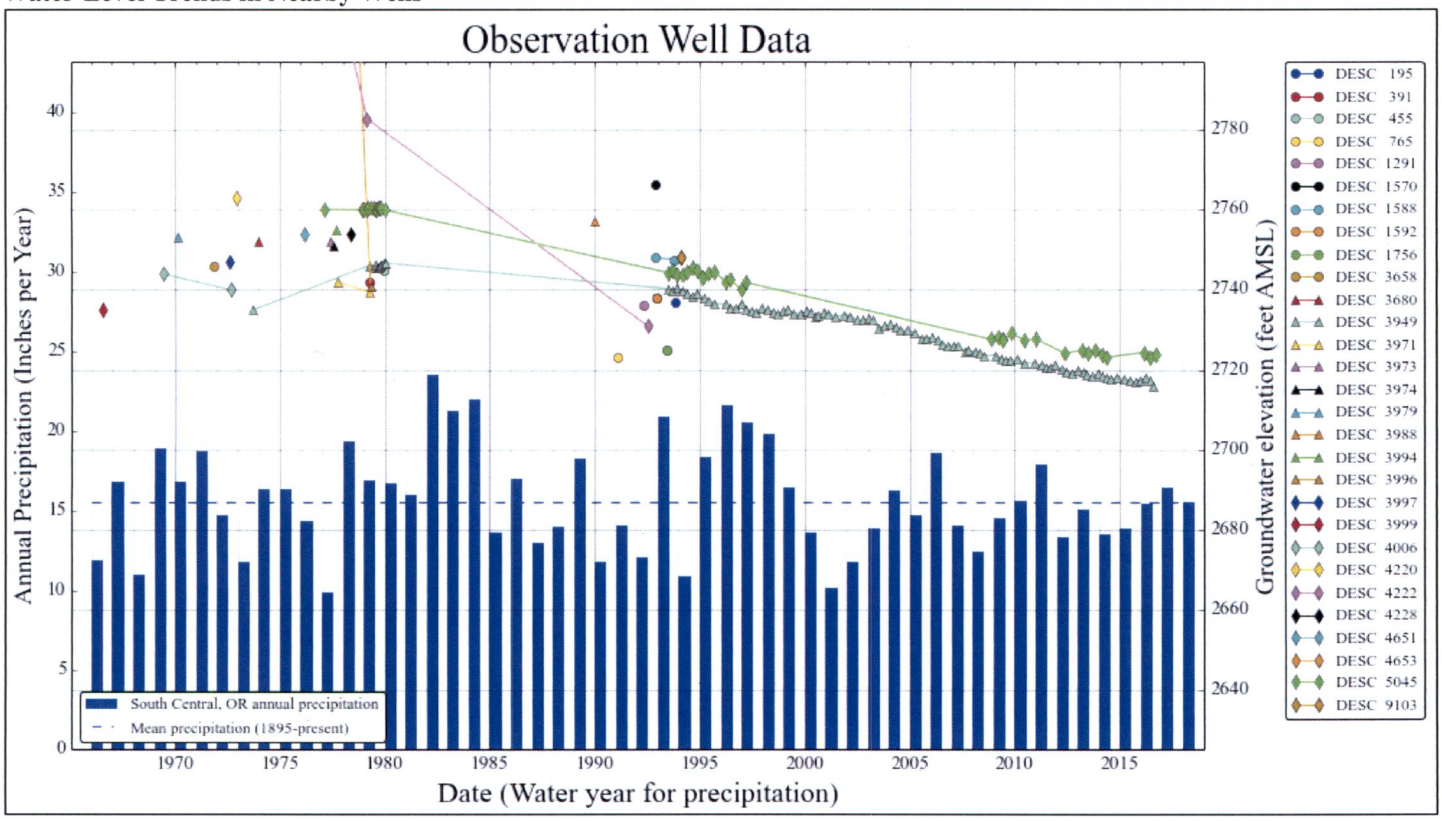
D2. **THE WELL does not appear to meet current well construction standards based upon:**

a. ☐ review of the well log;
b. ☐ field inspection by _____;
c. ☐ report of CWRE _____;
d. ☐ other: (specify) _____

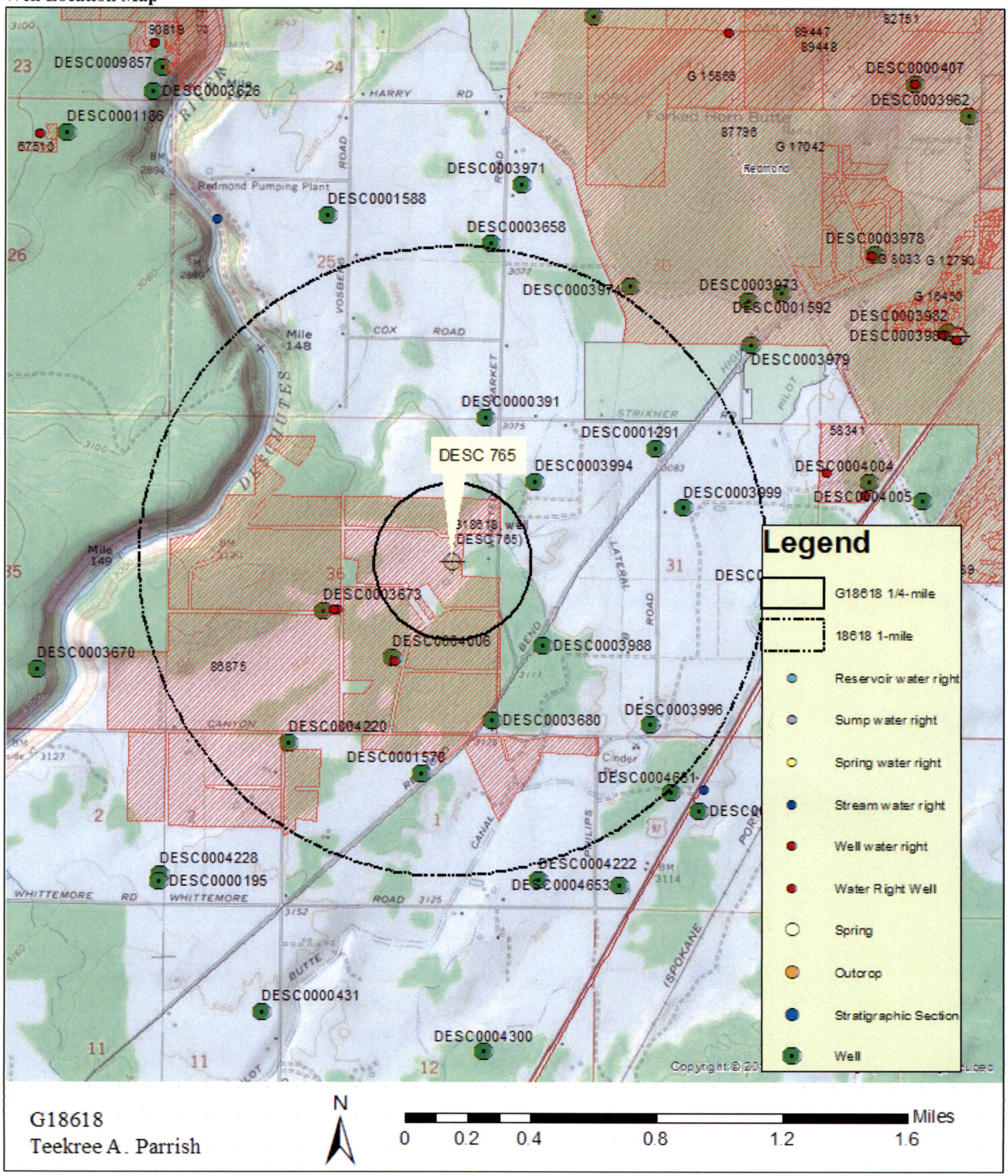
D3. **THE WELL construction deficiency or other comment is described as follows:** _____

D4. ☐ **Route to the Well Construction and Compliance Section for a review of existing well construction.**

Water-Level Trends in Nearby Wells



Well Location Map



E-2 Standard Application Completeness Checklist

Yes No

For use with Groundwater and Surface Water Applications Only

Minimum Requirements (OAR 690-310-0040)(ORS 537.400)

For use by WRD staff only

Application G-18618 County Deschutes Priority Date 3/8/18

Township 15S Range 12E Section 36

Amount 12gpm Use Irrigation WM Dist. # 11

Applicant Name TEEKREE PARRISH

Receipt No. 126033 Caseworker Assigned: ☐ Barbe ☐ Kim ☐ Lisa ☑ Scott

☑ Applicant/Organization Name and Mailing Address

☑ Signature of *all* applicants (include title or authority of representative if applicant is an organization or corporation). *Applicant's agent may NOT sign application.

☑ Property ownership: Does the applicant own all the land for the proposed project? ☑ Y ☐ N

If No:

- ☐ The affected landowner's name(s) and mailing address(s) must be listed
- ☐ A signed statement declaring the existence of either written authorization or an easement permitting access to land crossed by the proposed ditch canal or other work must be submitted.

☐ *For a SW Application*: Source of water must be indicated.

- ☐ If the source is stored water, is the stored water component filled out and does the applicant own the reservoir or include a non-expired agreement for stored water? (ORS 537.400)
  NOTE: *A surface water application cannot be filed at the same time as a Reservoir or Alt Reservoir if it will be for the use of the stored water under the PROPOSED Reservoir application, Exp. Secondary (E2)(ORS 537.147).*
- ☐ If for stored water not under contract, is the source authorized under a permit, certificate, or decree?
  Permit or Certificate issued ☐ Y ☐ N Permit or Certificate # _____

☐ *For a GW Application*: Well Development Tables completed and/or a well log report included (if existing)

☑ Proposed water use

- ☑ Amount of water from *each* source in GPM, CFS, or AF
- ☑ Period of use indicated
- ☐ If for supplemental irrigation, primary acreage or underlying permit or certificate number listed (*Primary and Supplemental Irrigation counts as 2 uses*)

☑ Water Management Section (*Estimates if the water system has not been designed*)

☐ Resource Protection Section (*N/A for Groundwater*)

☑ Project schedule (If system is already completed, indicate "existing.")

N/A

- ☐ Supplemental data sheets enclosed (if needed)
  - ☐ Form M (Municipal or Quasi-Municipal)
  - ☐ Spring Description Sheet (if source is a spring)

- ☑ A completed **Land-Use Form** or receipt signed and dated by the appropriate planning department officials. *Please be certain that the Land-Use form lists all lands involved and all uses proposed. Date of signature must be within the past 12 months.*

- ☑ A **Legal Description** of all the properties involved where water is diverted, crossed, and used. The Legal description includes a metes and bounds or other government survey description. A copy of the deed, land sales contract or title insurance policy can provide this information, or applicant may submit a lot book report prepared by a title company. Copies of tax bills are not acceptable.

TBP

- ☐ The proposed source **IS / IS NOT** (circle one) restricted or withdrawn from further appropriation. ***NOTE:*** *If it is withdrawn under ORS 538, return application and fees.*

- ☑ The **map** must meet all the minimum requirements of OAR 690-310-0050.
  - ☑ Township, Range, Section
  - ☑ Location of main canals, ditches, pipelines or flumes (if POA/POD is outside of POU)
  - ☑ Place of use, ¼-¼'s and tax lot clearly identified
  - ☑ Even map scale not less than 4" = 1 mile (1"= 1320 ft.); examples: 1" = 100 ft., 1" = 200 ft.
  - ☑ Location of *each* diversion point or well by reference to a recognized public land survey corner. Multiple wells shall be uniquely labeled, and identified on well logs, if existing.
  - ☑ Reference corner on map
  - ☑ North Directional Symbol
  - ☑ Number of acres per ¼ ¼ if for irrigation, nursery, or agriculture

- ☑ **Fees: Print out from Fee Calculator**

Total Fees	$ 2,880.00
Fee Paid	$ 2,880.00
Amount Due	$ 0

+ mitigation fee ($670.00)

Reviewed by: E.G. Date: 3/9/18