Groundwater Application Review Summary Form

Application # G- 18813

GW Reviewer M. Thoma **Date Review Completed:** 08-21-19

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.

✓ 21 Aug 19

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).

WATER RESOURCES DEPARTMENT

MEMO 08-22, 2019

TO: **Application G-** 18813

FROM: **GW:** M. Thoma
(Reviewer's Name)

SUBJECT: Scenic Waterway Interference Evaluation

☐ YES
The source of appropriation is within or above a Scenic Waterway
☒ NO

☐ YES
Use the Scenic Waterway condition (Condition 7J)
☒ NO

☐ Per ORS 390.835, the Groundwater Section is **able** to calculate ground water interference with surface water that contributes to a Scenic Waterway. The calculated interference is distributed below.

☐ Per ORS 390.835, the Groundwater Section is **unable** to calculate ground water interference with surface water that contributes to a scenic waterway; **therefore, the Department is unable to find that there is a preponderance of evidence that the proposed use will measurably reduce the surface water flows necessary to maintain the free-flowing character of a scenic waterway.**

DISTRIBUTION OF INTERFERENCE

Calculate the percentage of consumptive use by month and fill in the table below. If interference cannot be calculated, per criteria in 390.835, do not fill in the table but check the "unable" option above, thus informing Water Rights that the Department is unable to make a Preponderance of Evidence finding.

Exercise of this permit is calculated to reduce monthly flows in _____ Scenic Waterway by the following amounts expressed as a proportion of the consumptive use by which surface water flow is reduced.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec

MEMO

To: Kristopher Byrd, Well Construction and Compliance Section Manager

From: Joel Jeffery, Well Construction Program Coordinator

Subject: Review of Water Right Application G-18813

Date: August 27, 2019

The attached application was forwarded to the Well Construction and Compliance Section by Water Rights. Mike Thoma reviewed the application. Please see Mike's Groundwater Review and the Well Logs.

Applicant's Well #1 (LANE 64232): Based on a review of the Well Report, Applicant's Well #1 appears to protect the groundwater resource.

The construction of Applicant's Well #1 may not satisfy hydraulic connection issues.

Applicant's Well #2 is a proposed well and has not been construction. Therefore a review cannot be conducted.

Applicant's Well #3 (LANE 22364): Based on a review of the Well Report, Applicant's Well #3 appears to protect the groundwater resource.

The construction of Applicant's Well #3 may not satisfy hydraulic connection issues.

LANE 64232

LANE 64232

STATE OF OREGON
WATER SUPPLY WELL REPORT
(as required by ORS 537.765)

Instructions for completing this report are on the last page of this form. LANE 64232

(WELL I.D.)# L 76056

(START CARD) # 171480

(1) OWNER: Well Number

Name Terry Hibbard

Address 309 N "P" Street

City Cottage Grove State OR Zip 97424

(2) TYPE OF WORK

☑ New Well ☐ Deepening ☐ Alteration (repair/recondition) ☐ Abandonment

(3) DRILL METHOD:

☑ Rotary Air ☐ Rotary Mud ☐ Cable ☐ Auger

☐ Other

(4) PROPOSED USE:

☑ Domestic ☐ Community ☐ Industrial ☐ Irrigation

☐ Thermal ☐ Injection ☐ Livestock ☐ Other

(5) BORE HOLE CONSTRUCTION:

Special Construction approval ☐ Yes ☑ No Depth of Completed Well 100 ft.

Explosives used ☐ Yes ☑ No Type Amount

HOLE			SEAL			
Diameter	From	To	Material	From	To	Sacks or pounds
10	0	19	Bentonite	0	19	9 Sacks
6	19	100				

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

☑ Other Poured

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:	6	+2	19	250	☑	☐	☑	☐
					☐	☐	☐	☐
					☐	☐	☐	☐
					☐	☐	☐	☐
Liner:	4	0	100	SDR26	☐	☑	☑	☐
					☐	☐	☐	☐

Final location of shoe(s)

(7) PERFORATIONS/SCREENS:

☑ Perforations Method saw

☐ Screens Type Material

From	To	Slot size	Number	Diameter	Tele/pipe size	Casing	Liner
40	100	1/8	60	4	sdr26	☐	☑
						☐	☐
						☐	☐
						☐	☐
						☐	☐

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

☐ Pump ☐ Bailer ☑ Air ☐ Flowing Artesian

Yield gal/min	Drawdown	Drill stem at	Time
15+	total	100	1 hr.

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 Lane Latitude N43.48.114 Longitude W123.05.538

Township 20 S Range 03 W WM.

Section 29 1/4 1/4

Tax Lot 205 Lot Block Subdivision

Street Address of Well (or nearest address) 405 N "P" Street

Cottage Grove

(10) STATIC WATER LEVEL:

20 ft. below land surface. Date 3-16-05

Artesian pressure lb. per square inch. Date

(11) WATER BEARING ZONES:

Depth at which water was first found 50

From	To	Estimated Flow Rate	SWL
50	55	15+	20

(12) WELL LOG:

Ground Elevation

Material	From	To	SWL
Brown Clay	0	10	
Brown Gray Sandstone	10	60	20
Blue Gray Sandstone	60	100	

RECEIVED
MAR 24 2005
WATER RESOURCES DEPT
SALEM, OREGON

RECEIVED
MAY 11 2005
WATER RESOURCES DEPT
SALEM, OREGON

Date started 3-16-05 Completed 3-16-05

(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 water supply well construction standards. Materials used and information reported above are true to the best of my knowledge and belief.

WWC Number

Signed Date

(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 water supply well construction standards. This report is true to the best of my knowledge and belief.

WWC Number 1553

Signed Date 3-17-05

ORIGINAL & FIRST COPY-WATER RESOURCES DEPARTMENT SECOND COPY-CONSTRUCTOR THIRD COPY-CUSTOMER

NOTICE TO WATER WELL CONTRACTOR
The original and first copy of this report are to be filed with the WATER RESOURCES DEPARTMENT, SALEM, OREGON 97310 within 30 days from the date of well completion.

RECEIVED
AUG 24 1978
WATER RESOURCES DEPT.
SALEM, OREGON

WATER WELL REPORT
STATE OF OREGON
(Please type or print)
(Do not write above this line)

LANE NG 022364

State Well No. 20s/3w-29

State Permit No.

(1) OWNER:
Name Carl J. Hill
Address 1726 West Main
Cottage Grove, OR 97424

(2) TYPE OF WORK (check):
New Well ☒ Deepening ☐ Reconditioning ☐ Abandon ☐
If abandonment, describe material and procedure in Item 12.

(3) TYPE OF WELL:
Rotary ☒ Driven ☐
Cable ☐ Jetted ☐
Dug ☐ Bored ☐

(4) PROPOSED USE (check):
Domestic ☒ Industrial ☐ Municipal ☐
Irrigation ☐ Test Well ☐ Other ☐

CASING INSTALLED:
Threaded ☐ Welded ☒
6" Diam. from 0 ft. to 20 ft. Gage .250
4" Diam. from 0 ft. to 100 ft. Gage pvc
" Diam. from ft. to ft. Gage

PERFORATIONS:
Perforated? ☒ Yes ☐ No.
Type of perforator used saw
Size of perforations 1/8 in. by 2 in.
612 perforations from 40 ft. to 100 ft.
perforations from ft. to ft.
perforations from ft. to ft.

(7) SCREENS:
Well screen installed? ☐ Yes ☒ No
Manufacturer's Name
Type Model No.
Diam. Slot size Set from ft. to ft.
Diam. Slot size Set from ft. to ft.

(8) WELL TESTS:
Drawdown is amount water level is lowered below static level
Was a pump test made? ☐ Yes ☒ No If yes, by whom?
Yield: gal./min. with ft. drawdown after hrs.
" " "
Air Tested: Could fluctuate " "
~~Bailer test~~ 42½ gal./min. with 88 ft. drawdown after 1 hrs.
Artesian flow g.p.m.
Temperature of water Depth artesian flow encountered ft.

(9) CONSTRUCTION:
Well seal—Material used cement
Well sealed from land surface to 20 ft.
Diameter of well bore to bottom of seal 10 in.
Diameter of well bore below seal 6 in.
Number of sacks of cement used in well seal 5 sacks
How was cement grout placed? poured
Was a drive shoe used? ☐ Yes ☒ No Plugs Size: location ft.
Did any strata contain unusable water? ☐ Yes ☒ No
Type of water? depth of strata
Method of sealing strata off
Was well gravel packed? ☐ Yes ☒ No Size of gravel:
Gravel placed from ft. to ft.

(10) LOCATION OF WELL:
County Lane Driller's well number
¼ ¼ Section 29 T. 20s R. 3w W.M.
Bearing and distance from section or subdivision corner

(11) WATER LEVEL: Completed well.
Depth at which water was first found 40 ft.
Static level 12 ft. below land surface. Date 8-15-78
Artesian pressure lbs. per square inch. Date

(12) WELL LOG:
Diameter of well below casing 6"
Depth drilled 100 ft. Depth of completed well 100 ft.

Formation: Describe color, texture, grain size and structure of materials; and show thickness and nature of each stratum and aquifer penetrated, with at least one entry for each change of formation. Report each change in position of Static Water Level and indicate principal water-bearing strata.

MATERIAL	From	To	SWL
Top Soil	0	1	
Red Brown Clay	1	12	
Light Brown Cong.	12	25	
Gray Brown Cong.	25	55	
Gray Cong.	55	78	
Light Brown Cong.	78	82	
Blue Gray Cong.	82	100	

Work started 8-15 19 78 Completed 8-15 19 78
Date well drilling machine moved off of well 8-15- 19 78

Drilling Machine Operator's Certification:
This well was constructed under my direct supervision. Materials used and information reported above are true to my best knowledge and belief.
[Signed] K.A. Kinman (Drilling Machine Operator) Date 8-16, 19 78
Drilling Machine Operator's License No. 1160

Water Well Contractor's Certification:
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.
Name Casey Jones Well Drilling Co., Inc. (Person, firm or corporation) (Type or print)
Address 37115 Immigrant Road - Pleasant Hill, OR
[Signed] Casey Jones (Water Well Contractor)
Contractor's License No. 559 Date 8-17, 19 78

(USE ADDITIONAL SHEETS IF NECESSARY)

SP*45656-119

PUBLIC INTEREST REVIEW FOR GROUNDWATER APPLICATIONS

TO: Water Rights Section Date 08/21/2019
FROM: Groundwater Section M Thoma
Reviewer's Name
SUBJECT: Application G- 18813 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 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: **CG Nursery** County: **Lane**

A1. Applicant(s) seek(s) 0.07 cfs from 3 well(s) in the Willamette Basin, Coast Fork Willamette subbasin

A2. Proposed use Nursery (1.08 acres) Seasonality: 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	LANE 64232	1	Bedrock	0.07	20S/03W-29 SWNE	176'N, 555'E of cntr of S 29
2	PROPOSED	2	Bedrock	0.07	20S/03W-29 SWNE	565'N, 857'E of cntr of S 29
3	LANE 22364	3	Bedrock	0.07	20S/03W-29 SWNE	117'N, 992'E of cntr of S 29
4						

* 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	763	50	20	3-16-05	100	0-19	+2-19	0-100	40-100	15		A
2	771	-	30*	-	100	-	-	-	-	-	-	-
3	738	40	12	8-15-78	100	0-20	0-20	0-100	40-100	42.5	88	A

Use data from application for proposed wells.

A4. **Comments:** *the applicant's Well #2 is proposed. The well is located higher in elevation than wells #1 and #3 and will likely encounter a deeper SWL

A5. ☐ **Provisions of the** Willamette (OAR 690-502) 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:

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) **7C (7-yr SWL); Medium Water-Use Reporting**;
   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:** There are no water level data in the aquifer and vicinity of the applicant's proposed POA so Over-Appropriation and Capacity of the Resource cannot be determined and water-level reporting conditions in B1(d) are recommended. There is one permitted groundwater right within 1 mile of the applicant's proposed POA and this is located in the valley below the applicant's proposed POAs so will not likely be impacted by the proposed use. However, there are a few taxlots in the area that may have domestic wells so standard interference conditions should be applied.

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
1	**Fractured Bedrock of Fisher Fm**	☐	☒
2	**Fractured Bedrock of Fisher Fm**	☐	☒
3	**Fractured Bedrock of Fisher Fm**	☐	☒
		☐	☐

Basis for aquifer confinement evaluation: In fractured-bedrock aquifer systems the primary movement of water is through discrete but connected fracture sets. These fractures generally extend to near the surface and so water within these fractures is likely under atmospheric pressure (unconfined) despite an overall low storage coefficient for the aquifer system as a whole and static water levels often reported above water-bearing zones on driller's logs

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**	**Silk Creek**	**740**	**635-650**	**1400**	☒	☐	☐	☐	☒
2	**1**	**Silk Creek**	**725**	**635-650**	**1840**	☒	☐	☐	☐	☒
3	**1**	**Silk Creek**	**740**	**635-650**	**1460**	☒	☐	☐	☐	☒
1	**2**	**Coast Fk Willamette**	**740**	**625-640**	**3130**	☒	☐	☐	☐	☒
2	**2**	**Coast Fk Willamette**	**725**	**625-640**	**3190**	☒	☐	☐	☐	☒
3	**2**	**Coast Fk Willamette**	**740**	**625-640**	**2790**	☒	☐	☐	☐	☒
						☐	☐	☐	☐	☐

Basis for aquifer hydraulic connection evaluation: GW elevations are above SW elevations implying that groundwater is flowing towards and discharging to surface water.

Water Availability Basin the well(s) are located within:
COAST FK WILLAMETTE R > WILLAMETTE R – AB ROW R (ID# 533)

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	**1**	☐	☐	**None**	**-**	☐	**26.10**	☐	**< 25%**	☐
2	**1**	☐	☐	**None**	**-**	☐	**26.10**	☐	**< 25%**	☐
3	**1**	☐	☐	**None**	**-**	☐	**26.10**	☐	**< 25%**	☐
1	**2**	☐	☐	**MF 533**	**15**	☐	**26.10**	☐	**< 25%**	☐
2	**2**	☐	☐	**MF 533**	**15**	☐	**26.10**	☐	**< 25%**	☐
3	**2**	☐	☐	**MF 533**	**15**	☐	**26.10**	☐	**< 25%**	☐

Comments: stream-depletion at 30 d was modeled using the Hunt-1999 stream-depletion model with parameter values representative of a fractured-bedrock aquifer system. Only stream-depletion for Well #1 to SW #1 were modeled and are shown below because that pair would be the highest impact and stream-depletion will be less for each other Well-SW pair.

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?
			☐			☐		☐		☐

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		**No surface water sources were evaluated beyond 1 mile**											
Interference CFS													

Distributed Wells

Well	SW#	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
		%	%	%	%	%	%	%	%	%	%	%	%
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:** The applicant's proposed POAs would be producing from an aquifer that has been found to be hydraulically connected to surface water – specifically Silk Creek and the Coast Fork Willamette River – at a distance of less than 1 mile. The proposed maximum rate of appropriation is less than 1% of the pertinent adopted perennial streamflow and also less than 1% of the adopted instream water rights for either surface water source and stream-depletion is estimated to be less than 25% after 30 days of pumping. Per OAR 690-009-0040(4) the POAs are assumed to **not** have the Potential for Substantial Interference

References Used:

Hunt, B. 1999. *Unsteady Stream Depletion from Ground Water Pumping*. Journal of Hydrologic Engineering, Vol 8(1), pp 12-19

McClaughry, J. D., T. J. Wiley, M. L. Ferns, and I. P Madin. 2010. *Digital Geologic Map of the Southern Willamette Valley, Benton, Lane, Linn, Marion, and Polk Counties, Oregon.* Oregon Dept. of Geology and Mineral Industries. Open File Report O-10-13.

Oregon Department of Geology and Mineral Industries, *Geologic Map of Oregon*. http://www.oregongeology.org/geologicmap/

OWRD Well Log Database – Accessed 08/21/2019

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 Availability Tables

Water Availability Analysis
Detailed Reports

COAST FK WILLAMETTE R > WILLAMETTE R - AB ROW R
WILLAMETTE BASIN

Water Availability as of 8/21/2019

Watershed ID #: 533 (Map) Exceedance Level: 80%
Date: 8/21/2019 Time: 2:24 PM

Water Availability Calculation | Consumptive Uses and Storages | Instream Flow Requirements | Reservations | Water Rights | Watershed Characteristics

Water Availability Calculation

Monthly Streamflow in Cubic Feet per Second
Annual Volume at 50% Exceedance in Acre-Feet

Month	Natural Stream Flow	Consumptive Uses and Storages	Expected Stream Flow	Reserved Stream Flow	Instream Flow Requirement	Net Water Available
JAN	241.00	30.10	211.00	0.00	125.00	85.90
FEB	274.00	103.00	171.00	0.00	125.00	46.30
MAR	271.00	142.00	129.00	0.00	125.00	4.27
APR	218.00	102.00	116.00	0.00	15.00	101.00
MAY	129.00	77.30	51.70	0.00	15.00	36.70
JUN	67.30	5.47	61.80	0.00	15.00	46.80
JUL	38.80	6.82	32.00	0.00	15.00	17.00
AUG	27.50	6.10	21.40	0.00	15.00	6.40
SEP	26.10	4.67	21.40	0.00	15.00	6.43
OCT	31.40	2.07	29.30	0.00	15.00	14.30
NOV	77.20	12.10	65.10	0.00	125.00	-59.90
DEC	191.00	2.04	189.00	0.00	125.00	64.00
ANN	176,000.00	29,500.00	147,000.00	0.00	43,900.00	103,000.00

Well Location Map