

PUBLIC INTEREST REVIEW FOR GROUNDWATER APPLICATIONS

TO: Water Rights Section  
 FROM: Groundwater Section Karl Wozniak Reviewer's Name  
 SUBJECT: Application G- 18896 Re-Review Supersedes review of January 21, 2020 Date February ~~January 27, 2020~~  
 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: Patchwork Holdings LLC County: Linn

A1. Applicant(s) seek(s) 1.04 cfs from 3 well(s) in the Willamette Basin,  
Santiam River subbasin

A2. Proposed use Irrigation Seasonality: March 1 – October 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	Proposed	1	Alluvium	1.04	10S/3W-10 SW/SE	900' N, 1085' E fr S1/4 cor S 10
2	Proposed	2	Alluvium	1.04	10S/3W-15 NE/NW	405' S, 1270 W fr N1/4 cor S 15
3	Proposed	2	Alluvium	1.04	10S/3W-10 SE/SW	465' N, 212' W fr S1/4 cor S 10

\* 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	219				50+/-	0-18	TBD	TBD	TBD			
2	215				50+/-	0-18	TBD	TBD	TBD			
3	216				50+/-	0-18	TBD	TBD	TBD			

Use data from application for proposed wells.

A4. **Comments:** This is a review of a revised application received February 14, 2020. The revised application adds 2 additional proposed wells to mitigate the likely injury of existing rights if all of the production was realized at the proposed location of the single well on the original application (Well 2 in this review). The revised application requests 1.04 cfs (467 gpm) from 3 proposed wells, in any combination, for primary irrigation of 83.03 acres using an annual volume of 207.58 acre feet (2.5 acre feet/acre). The proposed construction for the wells is shown in table A3.

A5.  **Provisions of the** Willamette 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: The wells are not within 1/4-mile of a surface water source so the pertinent rules (OAR 690-502-0240) do not apply.

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, if issued, should contain condition #(s) **7c, large 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 **alluvial aquifer system** 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): See B3.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

B3. **Groundwater availability remarks:**

**Special Condition (B1diii):** Well 2 shall be limited to a maximum rate of 0.2228 cfs (100 gpm).

There is insufficient data to determine if the groundwater resource is over appropriated as prescribed in OAR 690-310-130.

The applicant requests 1.04 cfs (467 gpm) from 3 proposed wells for primary irrigation of 83.03 acres using an annual volume of 207.58 acre feet (2.5 acre feet/acre). The proposed wells are located in a narrow valley between Hale Butte and Scrael Hill about 1.75 miles southwest of the town of Jefferson. The local valley floor is underlain by about 50 feet of alluvial sediments which comprise the alluvial aquifer system. The upper 10-20 feet consists of the Willamette Silt Unit of Gannett and Caldwell (1998) which is generally described on local wells logs as clay, silty clay, or sandy clay. The underlying sediments are older alluvium which contains a few productive sand and gravel beds that generally have an aggregate thickness of less than 20 feet. The sediments are underlain by older sedimentary and volcanic rocks that form the low-yield bedrock aquifer system. The alluvial aquifer thins to a zero line about 650 feet north and 1850 feet south of the proposed well where older bedrock crops out at the surface on Hale Butte and Scrael Hill. The local water table resides in the Willamette Silt Unit which provides some degree of confinement for the aquifer. More productive floodplain sediments occur near the eastern margin of the property, near the location of Proposed Well 3, where the Willamette Silt has been removed by erosion and the alluvial aquifer system is unconfined.



Water wells are sparse in the local area. Tax lots and aerial imagery indicate only a few domestic wells on tax lots about 500 feet south of the proposed well. LINN 61319, the only field-located domestic well, presumed to be representative, is a six-inch diameter domestic well with a reported air-test yield of 12 gpm that encountered bedrock at a depth of 29 feet. The only nearby irrigation well, LINN 4705, at about 1100 feet to the southeast, is a 12-inch diameter well with a reported bailer-test yield of 75 gpm with 10 feet of drawdown. A few other irrigation wells (LINN 4662, LINN 4665, & LINN 4666) that lie at the eastern end of the valley have reported yields ranging from 300-600 gpm with only a few feet of drawdown. These higher production rates and smaller drawdowns are associated with younger sediments deposited in the modern floodplain of the Santiam River (Helm and Leonard, 1977).

The limited thickness of the productive sediments in the vicinity of the proposed wells and the nearby northern and southern edge of the alluvial aquifer indicate a limited production potential, consistent with the relatively low yield (75 gpm) reported for LINN 4705. However, higher production rates are more likely in the eastern portion of the property, near Proposed Well 1, in areas underlain by recent floodplain sediments. These factors indicate that it is reasonably likely that groundwater will be available at the proposed rate of 1.04 cfs (467 gpm) from a combination of the 3 proposed wells.

The limited thickness of the productive sediments in the vicinity of Proposed Well 2 at the narrow western edge of the valley indicates a high probability of injurious interference, at the proposed rate, with nearby domestic wells which already fully penetrate the alluvial aquifer (e.g. LINN 61319). However, the probability of injurious interference will be significantly decreased if the maximum pumping rate at this well is limited to 100 gpm.

Groundwater-level data is sparse in the immediate area but limited data from nearby well LINN 4705 suggest that local water levels are probably stable, consistent with the very low density of wells in the area.

**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	Alluvial aquifer system	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2	Alluvial aquifer system	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3	Alluvial aquifer system	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Basis for aquifer confinement evaluation:** Well logs of nearby wells indicate some degree of confinement as static water levels rise 10-15 feet above reported water-bearing sands and gravels. Well 1 may encounter unconfined water-bearing zones if it encounters Holocene floodplain sediments (the precise location of the contact is uncertain).

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	Santiam River	208-211	205-210	3600	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2	1	Santiam River	208-211	205-210	5880	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3	1	Santiam River	208-211	205-210	4400	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Basis for aquifer hydraulic connection evaluation:** Porous media are continuous between the proposed well and the Santiam River. Groundwater elevations at the proposed well site (based on reported water levels for nearby wells LINN 4705 & LINN 61319) are essentially equivalent to the elevations of adjacent reaches of the river. These facts indicate that the alluvial aquifer is hydraulically connected to local streams.

**Water Availability Basin the well(s) are located within:** WAB 167, Santiam R > Willamette R – At Mouth

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	<input type="checkbox"/>	<input type="checkbox"/>	MF167	320	<input type="checkbox"/>	923	<input type="checkbox"/>		<input type="checkbox"/>
3	1	<input type="checkbox"/>	<input type="checkbox"/>	MF167	320	<input type="checkbox"/>	923	<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"/>

**Comments:** Interference at 30 days was not estimated because of the lack of a readily available model that can simulate the complex geometry of the local aquifer system. However, the distances from the wells to the Santiam River (all greater than 3600 feet) and the transition from an unconfined aquifer beneath most of proposed irrigated lands to an unconfined aquifer to the east in the floodplain of the river suggest that interference at 30 days is likely to be much less than 25%.

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													
(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:** Impacts to the Santiam River were not evaluated in table C4a because the proposed maximum rate is below 1% of the 80%-exceedance flow for all months of the year.

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:**

Gannett, M.W. and Caldwell, R., 1998, Geologic framework of the Willamette Lowland aquifer system, Oregon and Washington: U.S. Geological Survey Professional Paper 1424-A, 32 p.

Helm, D.C. and Leonard, A.R., 1977, Ground-water resources of the lower Santiam River basin, middle Willamette Valley, Oregon: Oregon Department of Water Resources Ground-Water Report no. 25, 75 p.

O'Connor, J.E., Sarna-Wojcicki, A., Wozniak, K.C., Polette, D.J., and Fleck, R.J., 2001: U.S. Geological Survey Professional Paper 1620.

Woodward, D.G., Gannett, M.W., and Vaccaro, J.J., 1998, Hydrogeologic framework of the Willamette Lowland aquifer system, Oregon and Washington: U.S. Geological Survey Professional Paper 1424-B, 82p.

**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

DETAILED REPORT ON THE WATER AVAILABILITY CALCULATION

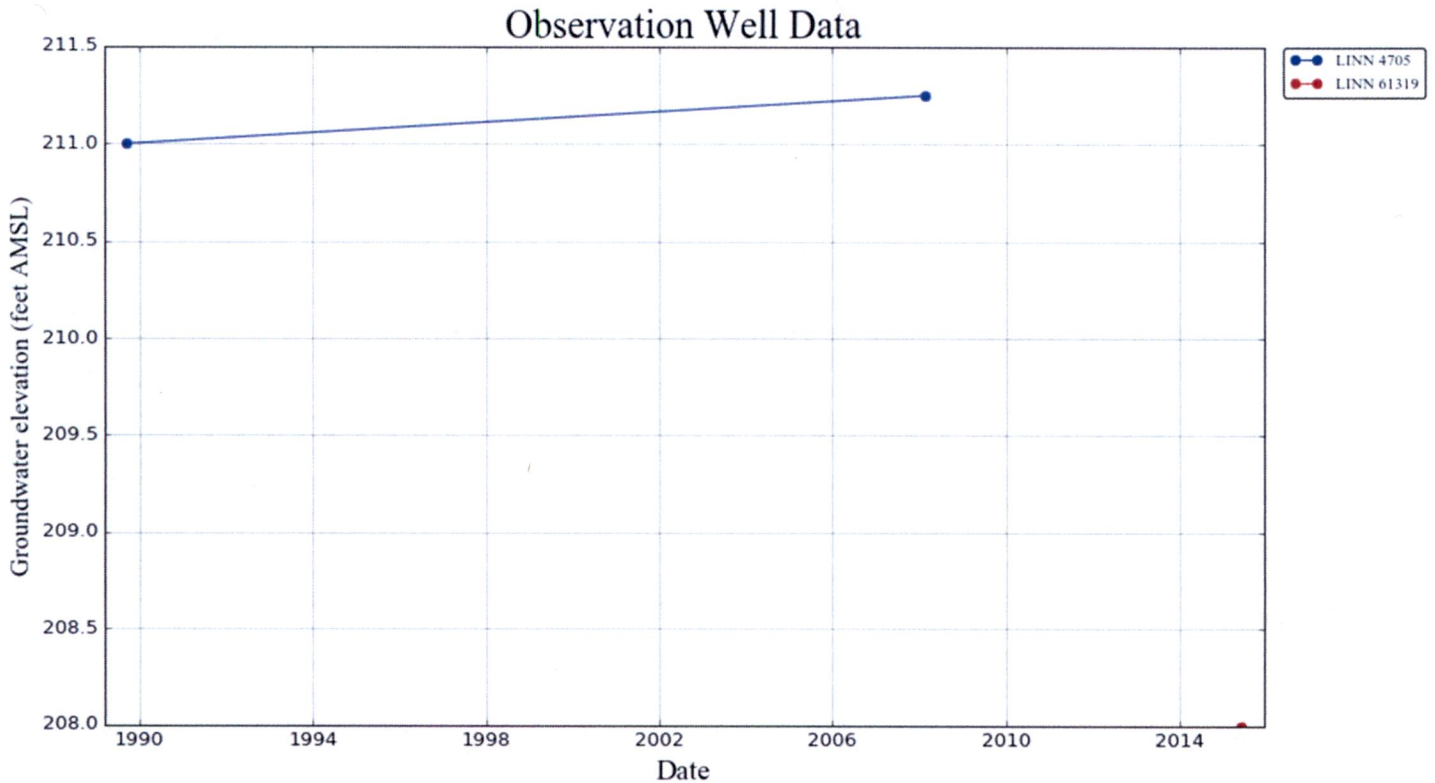
SANTIAM R > WILLAMETTE R - AT MOUTH  
 Basin: WILLAMETTE

Watershed ID #: 167  
 Time: 11:44 AM

Exceedance Level: 80  
 Date: 02/27/2020

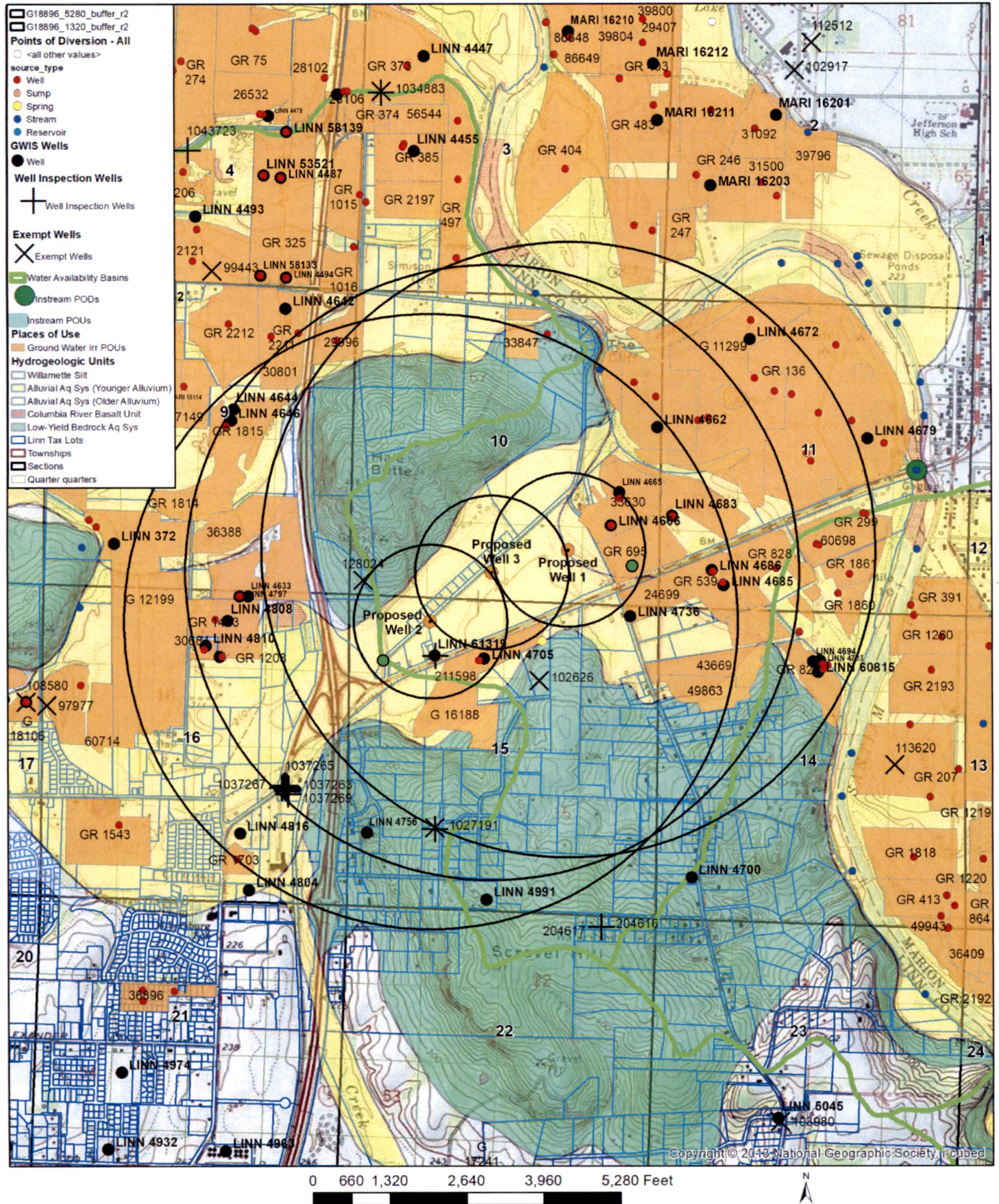
Month	Natural Stream Flow	Consumptive Use and Storage	Expected Stream Flow	Reserved Stream Flow	Instream Requirements	Net Water Available
Monthly values are in cfs. Storage is the annual amount at 50% exceedance in ac-ft.						
JAN	5,860.00	1,060.00	4,800.00	0.00	320.00	4,480.00
FEB	6,590.00	3,330.00	3,260.00	0.00	320.00	2,940.00
MAR	5,870.00	2,900.00	2,970.00	0.00	320.00	2,650.00
APR	5,370.00	2,890.00	2,480.00	0.00	320.00	2,160.00
MAY	5,020.00	1,930.00	3,090.00	0.00	320.00	2,770.00
JUN	2,600.00	1,080.00	1,520.00	0.00	320.00	1,200.00
JUL	1,380.00	1,020.00	362.00	0.00	320.00	42.20
AUG	1,030.00	957.00	72.80	0.00	320.00	-247.00
SEP	923.00	847.00	75.90	0.00	320.00	-244.00
OCT	1,020.00	772.00	248.00	0.00	320.00	-71.90
NOV	2,820.00	726.00	2,090.00	0.00	320.00	1,770.00
DEC	5,940.00	719.00	5,220.00	0.00	320.00	4,900.00
ANN	4,380,000	1,090,000	3,280,000	0	232,000	3,060,000

Water Levels in Nearby Wells





### Well Location Map





Selected Well Logs

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

WATER RESOURCES DEPT.  
SALEM, OREGON

(START CARD) # 10594

OCT 12 1989

10s/3w/15ba

LINN 4705

**(1) OWNER:**  
Name Ray Wayne Smith Well Number: \_\_\_\_\_  
Address PO Box 1987  
City Albany State ore Zip 97321

**(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  Yes  No Depth of Completed Well 57 ft.  
Explosives used  Yes  No Type \_\_\_\_\_ Amount \_\_\_\_\_

HOLE			SEAL			Amount sacks or pounds
Diameter	From	To	Material	From	To	
14	0	10	concrete	0	10	15 sacks
10	17	40	steel			
10	40	57	spindle			

How was seal placed: Method  A  B  C  D  E  
 Other \_\_\_\_\_  
Backfill placed from 0 ft. to 10 ft. Material concrete  
Gravel placed from \_\_\_\_\_ ft. to \_\_\_\_\_ ft. Size of gravel \_\_\_\_\_

**(6) CASING/LINER:**

Diameter	From	To	Gauge	Steel	Plastic	Welded	Threaded
10	17	40	.250	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Liner: \_\_\_\_\_  
Final location of shoe(s) 40

**(7) PERFORATIONS/SCREENS:**  
 Perforations Method brush Material \_\_\_\_\_  
 Screens Type \_\_\_\_\_ Material \_\_\_\_\_

From	To	Slot size	Number	Diameter	Tele/pipe size	Casing	Liner
27	37	1/4 x 5/8	80			<input checked="" type="checkbox"/>	<input type="checkbox"/>

**(8) WELL TESTS: Minimum testing time is 1 hour**  
 Pump  Bailer  Air  Flowing Artesian  
Yield gal/min 75 Drawdown 10 Drill stem at \_\_\_\_\_ Time 1 hr.

Temperature of water 52.4 Depth Artesian Flow Found \_\_\_\_\_  
Was a water analysis done?  Yes  No 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 Linn Latitude 44 38' 15" Longitude 123 03' 00"  
Township 10S N or S, Range 3W E or W, WM.  
Section 15 NE 1/4 NW 1/4  
Tax Lot \_\_\_\_\_ Lot \_\_\_\_\_ Block \_\_\_\_\_ Subdivision \_\_\_\_\_  
Street Address of Well (or nearest address) Albany ore 97321

**(10) STATIC WATER LEVEL:**  
9 ft. below land surface. Date 9-19-89  
Artesian pressure \_\_\_\_\_ lb. per square inch. Date \_\_\_\_\_

**(11) WATER BEARING ZONES:**  
Depth at which water was first found 22

From	To	Estimated Flow Rate	SWL
22	37	100 +	9

**(12) WELL LOG:** Ground elevation 230

Material	From	To	SWL
Top Soil	0	2	
Clay Brown sandy	2	22	
Silt Brown med gravel	22	37	9
Clay Brown sandy	37	43	
Clay stone very hard	43	57	

Date started 9-14-89 Completed 9-19-89

**(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 \_\_\_\_\_ WWC Number \_\_\_\_\_  
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 well construction standards. This report is true to the best of my knowledge and belief.  
Signed Bob Scheller WWC Number 610  
Date 9-19-89

ORIGINAL & FIRST COPY - WATER RESOURCES DEPARTMENT SECOND COPY - CONSTRUCTOR THIRD COPY - CUSTOMER 8909C 3/88



RECEIVED BY OWRD  
LINN 61319

LINN 61319

STATE OF OREGON  
WATER SUPPLY WELL REPORT  
(as required by ORS 537.765 & OAR 690-205-0210)

JUL 0 3 2015

WELL LABEL # L 6111963

SALEM, OR

START CARD # 211598

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

(1) LAND OWNER  
First Name LINDA Last Name JOHNSON  
Company \_\_\_\_\_  
Address 38928 Hwy 99E  
City ALBANY State ORE Zip 97322

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

(3) DRILL METHOD  
 Rotary Air  Rotary Mud  Cable  Auger  Cable Mud  
 Reverse Rotary  Other \_\_\_\_\_

(4) PROPOSED USE  Domestic  Irrigation  Community  
 Industrial/Commercial  Livestock  Dewatering  Injection  
 Thermal  Other \_\_\_\_\_

(5) BORE HOLE CONSTRUCTION Special Standard:  Yes (attach copy)  
Depth of Completed Well 40 ft.

BORE HOLE			SEAL			Amount	Scks/lbs
Dia	From	To	Material	From	To		
16"	0	18	Bentonite	0	18	8	Scks
6"	18	40	calculated			8	Scks

How was seal placed: Method  A  B  C  D  E  
 Other Poured Dry  
Backfill placed from \_\_\_\_\_ ft. to \_\_\_\_\_ ft. Material \_\_\_\_\_  
Filter pack from \_\_\_\_\_ ft. to \_\_\_\_\_ ft. Material \_\_\_\_\_ Size \_\_\_\_\_  
Explosives used:  Yes Type \_\_\_\_\_ Amount \_\_\_\_\_

Casing	Liner	Dia	+	From	To	Gauge	Steel	Plastic	Welded	Thrd
X		6"	+	1	29	.250	X		X	

Shoe  Inside  Outside  Other Location of shoe(s) 29'  
Temporary casing  Yes Diameter \_\_\_\_\_ From \_\_\_\_\_ To \_\_\_\_\_

(7) PERFORATIONS/SCREENS  
Perforations Method HOLTE  
Screens Type SLOT Material STEEL

Perf	Screen	Casing	Liner	Screen Dia	From	To	Screen/slot width	Slot length	# of slots	Tele/pipe size
X	X				20	26	1/4"	1"	216	

(8) WELL TESTS: Minimum testing time is 1 hour  
 Pump  Bailor  Air  Flowing Artesian  
Yield gal/min 12+ Drawdown \_\_\_\_\_ Drill stem/Pump depth 35' Duration (hr) 2 hrs

Temperature 54 °F Lab analysis  Yes By TDS - 127  
Water quality concerns?  Yes (describe below)

From	To	Description	Amount	Units

(9) LOCATION OF WELL (legal description)  
County LINN Twp 10 or S Range 3 or W.M.  
Sec 15 NW 1/4 of the NW 1/4 Tax Lot 200  
Tax Map Number \_\_\_\_\_ Lot \_\_\_\_\_  
Lat \_\_\_\_\_ " or \_\_\_\_\_ DMS or DD  
Long \_\_\_\_\_ " or \_\_\_\_\_ DMS or DD  
Street Address of Well (or nearest address) Same

	Date	SWL (psi)	+	SWL (ft)
Existing Well/Predeepening				
Completed Well	<u>6-1-15</u>			<u>- 6'</u>

Flowing Artesian?  Yes Dry Hole?  Yes

WATER BEARING ZONES Depth water was first found 20'

SWL Date	From	To	Est Flow	SWL (psi)	+	SWL (ft)
<u>6-1-15</u>	<u>20</u>	<u>26</u>	<u>12+ gpm</u>			<u>- 6'</u>

(11) WELL LOG Ground Elevation \_\_\_\_\_

Material	From	To
TOP SOIL	0	2
CLAY-BROWN w/GRIT	2	16
GRAVEL w/CLAY-BROWN	16	19
SAND w/GRAVEL	19	26
CLAY-BROWN w/GRAVEL	26	29
CLAYSTONE-GRAY-SFT	29	40

RECEIVED BY OWRD  
JUL 06 2015  
SALEM, OR

RECEIVED BY OWRD  
JUL 28 2015  
SALEM, OR

Date Started 6-1-15 Completed 6-1-15

(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. Materials used and information reported above are true to the best of my knowledge and belief.

License Number \_\_\_\_\_ Date \_\_\_\_\_  
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. 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.

License Number 6644 Date 6-1-15  
Signed Charles D. August  
Contact Info. (optional) \_\_\_\_\_