

Groundwater Application Review Summary Form

Application # G- 18909

GW Reviewer Phil Marcy Date Review Completed: 2/26/2020

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.

✓
2/27/20

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).

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

943
Malheur

JAN 17 1989
MALH 943
WATER RESOURCES DEPT.
SALMON OREGON

8424
188/45 E/1ad

(1) OWNER: Well Number: _____
Name Ray Belnap
Address 4137-Kochsmeir Rd.
City Vale State Ore. Zip 97918

(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 31 ft.
Yes No
Explosives used Type _____ Amount _____

HOLE		SEAL		Amount
Diameter	From	To	Material	sacks or pounds
6	0	20	Bentonite	12
12	18	31		

How was seal placed: Method A B C D E
 Other Bentonite Seal
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: 12	+1	26	.250	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Liner:				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Location of shoe(s) _____

PERFORATIONS/SCREENS:
 Perforations Method Torch
 Screens Type _____ Material _____

From	To	Slot size	Number	Diameter	Tele/pipe size	Casing	Liner
18	24	3/8x8	40			<input type="checkbox"/>	<input type="checkbox"/>

(8) WELL TESTS: Minimum testing time is 1 hour
 Pump Bailer Air Flowing Artesian
Yield gal/min 50 Drawdown none Drill stem at _____ Time 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 none
 Salty Muddy Odor Colored Other _____
Depth of strata: _____

(9) LOCATION OF WELL by legal description:
County Malheur Latitude _____ Longitude _____
Township 18 S Nor S, Range 45 E E or W, WM.
Section 17 S.E. 1/4 N.E. 1/4
Tax Lot 5800 Lot _____ Block _____ Subdivision _____
Street Address of Well (or nearest address) 1677- Vale Veiw Rd.
Vale, Oregon 97918

(10) STATIC WATER LEVEL:
8 ft. below land surface. Date 12/12/88
Artesian pressure _____ lb. per square inch. Date _____

(11) WATER BEARING ZONES:
Depth at which water was first found 18

From	To	Estimated Flow Rate	SWL
18	24	50	8

(12) WELL LOG: Ground elevation _____

Material	From	To	SWL
Top Soil	0	5	
Brown Clay	5	18	
Gravel	18	24	
Blue Clay	24	31	

Date started 12/6/88 Completed 12/12/88

(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 Winifred Page WWC Number 564
Date 12/31/88

STATE OF OREGON WATER SUPPLY WELL REPORT

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

WELL LABEL # L 106233

START CARD # 1018225

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

(1) LAND OWNER Owner Well I.D. 106233 First Name Roy Last Name Belnap Company Address 4137 Kochsmeir Rd City Vale State OR Zip 97918

(2) TYPE OF WORK [X] Deepening [X] Alteration (repair/recondition)

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

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

(5) BORE HOLE CONSTRUCTION Special Standard: [] Yes (attach copy) Depth of Completed Well 32 ft.

Table with columns: Dia, From, To, Material, From, To, Amount, GCS/lbs. Row 1: 20", 0, 32, Bentonite chip, 0, 18, 36, 600/lbs

How was seal placed: Method [X] Other Poured from surface Backfill placed from 18 ft. to 32 ft. Material 3/8 minus Gravel

(6) CASING/LINER Table with columns: Csgs, Lnr, Dia, From, To, Gauge, Steel, Plastic, Welded, Thrd. Row 1: X, 12", 2, 18, 1/4, X, X

Shoe [] Inside [] Outside [] Other Location of shoe(s) Temporary casing [] Yes Diameter From To

(7) PERFORATIONS/SCREENS Perforations Method Screens Type SPUD Material Stainless

Table with columns: Perf, Scrn, Csgs, Lnr, Screen Dia, From, To, Screen/slot width, Slot length, # of slots, Tele/pipe size. Row 1: X, 12", 18, 28, 1/16

(8) WELL TESTS: Minimum testing time is 1 hour [X] Pump [] Bailer [] Air [] Flowing Artesian Yield gal/min 308 Drawdown 23' Drill stem/Pump depth 30' Duration (hr) 10hr

Temperature 65 °F Lab analysis [] Yes By Water quality concerns? [] Yes (describe below) Table with columns: From, To, Description, Amount, Units

(9) LOCATION OF WELL (legal description) County Malheur Twp 18.00 N or 19 Range 45.00 W W.M. Sec 17 NE 1/4 of the NW 1/4 Tax Lot 5900

(10) STATIC WATER LEVEL Table with columns: Date, SWL(psi), SWL(ft). Existing Well/Predeepening 10-22-12 7' Completed Well 10-26-12 7'

WATER BEARING ZONES Table with columns: SWL Date, From, To, Est Flow, SWL (psi), SWL (ft). Row 1: 10-23, 7, 17, ?, 7' Row 2: 10-24, 17, 28, 308, 7'

(11) WELL LOG Ground Elevation Table with columns: Material, From, To. Row 1: Clay Brown, 0, 7 Row 2: Sand Brown, 7, 17 Row 3: Gravel, 17, 28 Row 4: Clay Blue, 28, 32

Date Started 10-23-12 Completed 10-26-12

(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.

(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.

PUBLIC INTEREST REVIEW FOR GROUNDWATER APPLICATIONS

TO: Water Rights Section Date 02/26/2020
 FROM: Groundwater Section Phillip I. Marcy
 Reviewer's Name
 SUBJECT: Application G- 18909 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: Bob Belnap County: Malheur

A1. Applicant(s) seek(s) 0.125 cfs from 1 well(s) in the Malheur Basin,
 _____ subbasin

A2. Proposed use Irrigation (10 acres) Seasonality: March 1st – October 31st (245 days)

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	<u>MALH 53992</u>	1	Alluvium	0.125	18S/45E-17 NW-NE	140' S, 2025' W fr NE cor S 17
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	2251	7	7	10/24/2012	32	0-18	0-18; 28-32	-	18-28'	308	23	Pump

Use data from application for proposed wells.

A4. **Comments:** The applicant proposes to use MALH 53992 for primary irrigation of 10 acres.

A5. **Provisions of the** Malheur 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) _____;
 - 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:** Water levels in the area of the proposed POA well are stable, in part due to percolation of surface water used for flood irrigation in the Vale Irrigation District, and the low density of groundwater appropriation in this 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 sands and gravels	<input type="checkbox"/>	<input checked="" type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>

Basis for aquifer confinement evaluation: The reported static water level in the POA well is exactly the same as the depth water was first encountered, in addition to the lack of any widespread low-permeability horizon that would significantly impede vertical movement of groundwater.

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	Willow Creek	2244	2243-2254	1580	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Basis for aquifer hydraulic connection evaluation: The water level reported in the POA well is commiserate with the elevation of nearby surface water, and there is no significant barrier to movement between the two.

Water Availability Basin the well(s) are located within: WILLOW CR > MALHEUR R - AT MOUTH (# 31011901)

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"/>	NA	NA	<input type="checkbox"/>	4.45	<input checked="" type="checkbox"/>	1.63%	<input checked="" type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>

C3b. **690-09-040 (4):** Evaluation of stream impacts by total appropriation for all wells determined or assumed to be **hydraulically connected and less than 1 mile** from a surface water source. **Complete only if Q is distributed among wells.** Otherwise same evaluation and limitations apply as in C3a above.

	SW #	Qw > 5 cfs?	Instream Water Right ID	Instream Water Right Q (cfs)	Qw > 1% ISWR?	80% Natural Flow (cfs)	Qw > 1% of 80% Natural Flow?	Interference @ 30 days (%)	Potential for Subst. Interfer. Assumed?
		<input type="checkbox"/>			<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>
		<input type="checkbox"/>			<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>
		<input type="checkbox"/>			<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>
		<input type="checkbox"/>			<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>

Comments: PSI was triggered due to the proposed pumping rate being greater than 1% of the 80% exceedance rate for the lowest flow month (September) within the current WAB. The applicant would need to lower the proposed rate to 0.0445 to overcome this finding at the proposed location.

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													
(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: This section does not apply.

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:** _____
Based on the well location and its proximity to Hope Drain, which lies between the POA well and Willow Creek, the proposed use is unlikely to have a significant impact on the nearby reach of Willow Creek. Local Watermaster Ron Jacobs reports that these drains are unlined, and canal and ditch leakage are likely the primary sources of recharge to local groundwater systems according to our conceptual understanding of the shallow aquifer system here (Gannett, 1990). Considering these factors, the cone of depression induced by pumping at the POA well is unlikely to cross Hope Ditch toward the South and West, where it would impact Willow Creek. However, Division 9 rules require a finding of PSI with Willow Creek based upon the low flows in August and September.

References Used:
Ground Water Report #34 by Marshall Gannett, 1990.

Local well logs, Application review G-17614.

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) _____

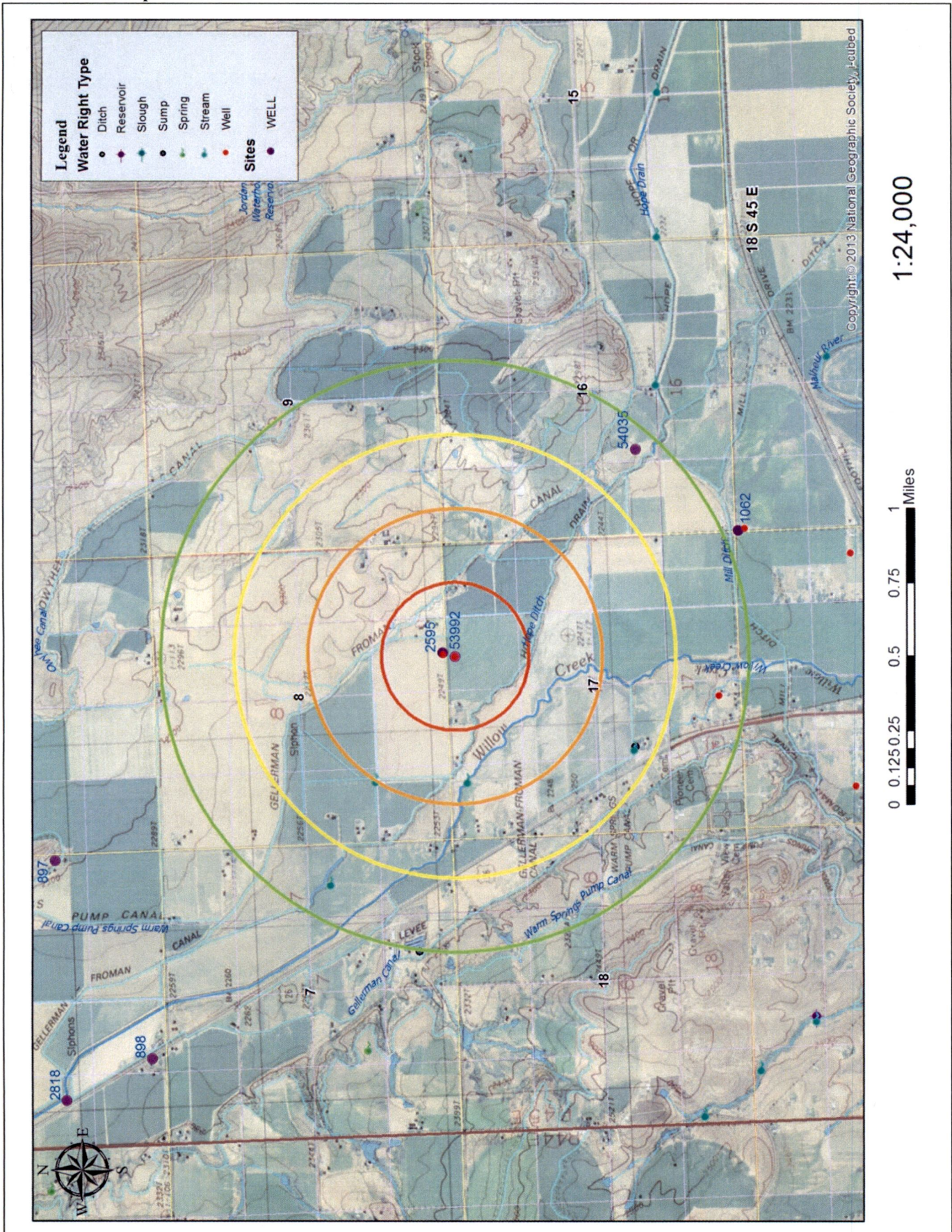
D3. **THE WELL construction deficiency or other comment is described as follows:** _____

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

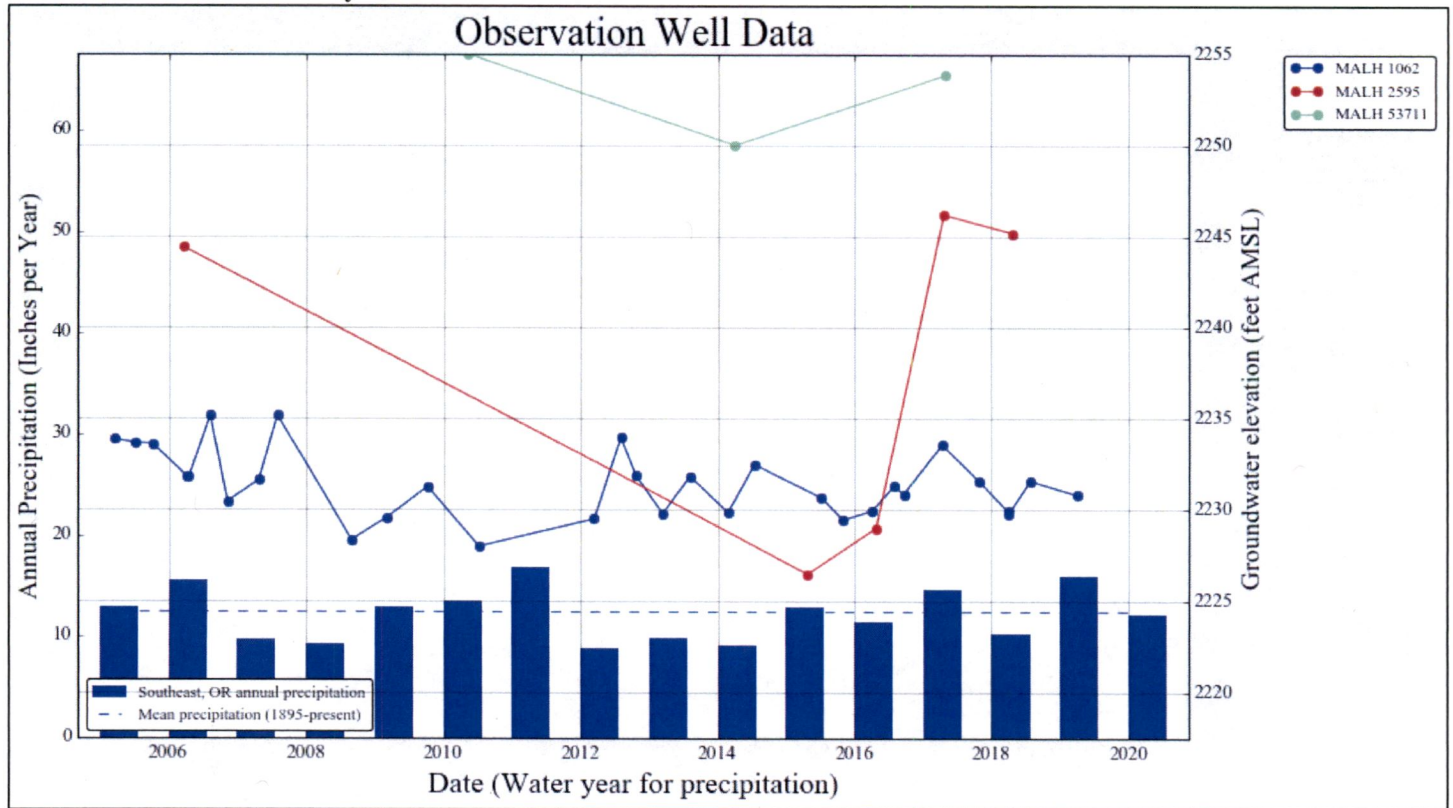
Water Availability Tables

DETAILED REPORT ON THE WATER AVAILABILITY CALCULATION						
Watershed ID #: 31011901 Time: 3:12 PM		WILLOW CR > MALHEUR R - AT MOUTH Basin: MALHEUR			Exceedance Level: 80 Date: 02/26/2020	
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	13.70	22.00	-8.25	0.00	0.00	-8.25
FEB	32.50	82.60	-50.10	0.00	0.00	-50.10
MAR	54.40	141.00	-86.60	0.00	0.00	-86.60
APR	71.40	181.00	-110.00	0.00	0.00	-110.00
MAY	58.70	215.00	-157.00	0.00	0.00	-157.00
JUN	44.30	182.00	-138.00	0.00	0.00	-138.00
JUL	15.40	96.00	-80.60	0.00	0.00	-80.60
AUG	6.52	60.30	-53.80	0.00	0.00	-53.80
SEP	4.45	40.20	-35.70	0.00	0.00	-35.70
OCT	6.77	7.91	-1.14	0.00	0.00	-1.14
NOV	7.26	11.60	-4.35	0.00	0.00	-4.35
DEC	9.14	14.50	-5.41	0.00	0.00	-5.41
ANN	36,500	63,600	1,790	0	0	1,790

Well Location Map



Water-Level Trends in Nearby Wells



MALH 943

For Official Use Only by The Oregon Water Resources Department:

Received Date: _____

County Well Log ID # _____

Well Identification Tag #

L 106233

WELL ID TAG

APPLICATION FOR WELL IDENTIFICATION

ATTACHED BY
STATE WELL INSPECTION

ROBERT D. MAYNARD

LANDOWNER INFORMATION

Name: RAYMOND BELNAP

Mailing Address: 4137 KOCHSMER ROAD

City: VALE

State: OREGON

Zip: 97918

Return Well Tag to (if different than mailing address): _____

WELL LOCATION INFORMATION

County: MALHEUR Township: 18 S North or South (circle one) Range: 45 E East or West (circle one),

Section: 17 NW 1/4 NE 1/4 Tax Lot #:

N 44.01036 W - 117.23315
Street Address of Well (if different than mailing address): _____

WELL INFORMATION (Do Not Complete If Well Report is Attached)

Type of Well (i.e. domestic, irrigation, etc): IRRIGATION Date Well Constructed: _____

Well Constructor/Company: _____

Well Depth (in feet): 50 FEET Diameter of Well Casing (in inches): 12 INCHES

Landowner Who Had Well Constructed or Previous Owner at the Time Well was Constructed (if known): _____

RECEIVED BY OWRD

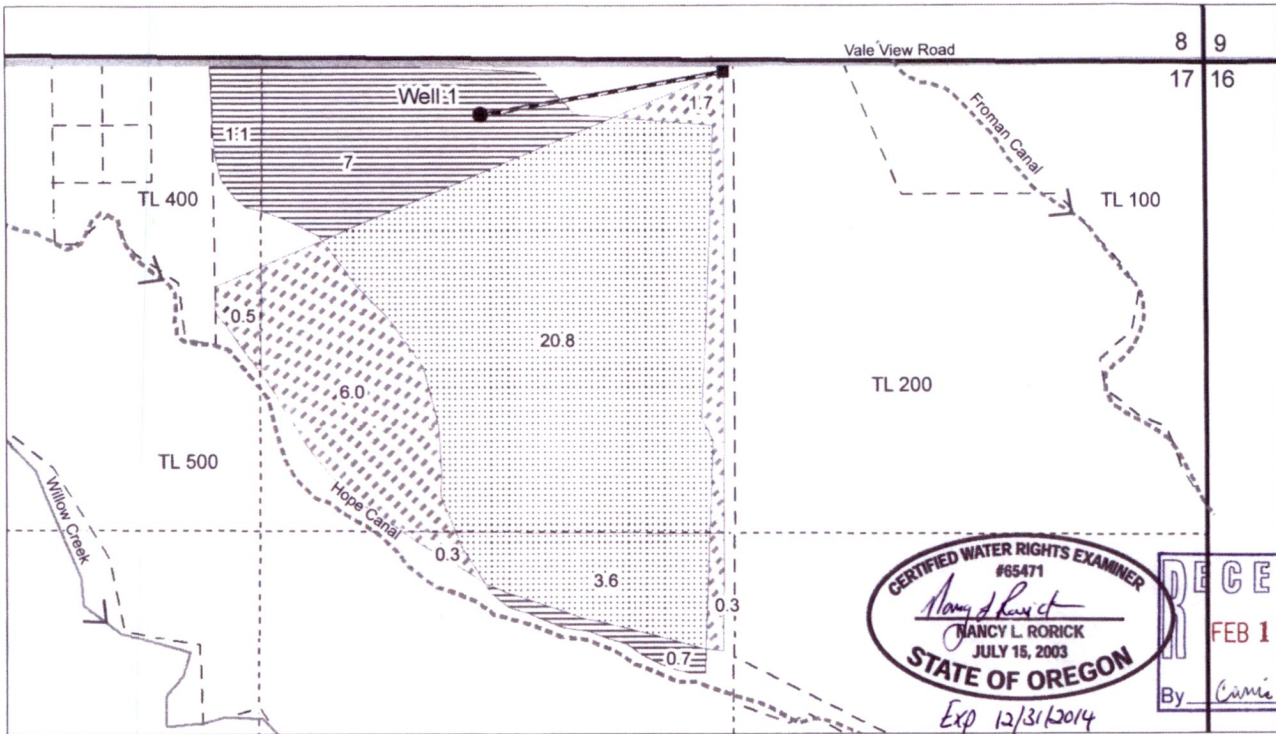
AUG 06 2012

Other Information: _____

SALEM, OR

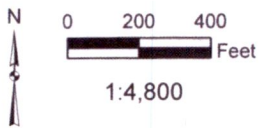
T18S R45E Section 17, W.M.

Superseding



CERTIFIED WATER RIGHTS EXAMINER
#65471
Nancy L. Rorick
NANCY L. RORICK
JULY 15, 2003
STATE OF OREGON
Exp 12/31/2014

RECEIVED
FEB 11 2014
By *Carmie Matten*



Well 1 (L 106233, Malh 53992) is located 2025 feet west and 140 feet south of the northeast corner of section 17.

This map is not intended to provide legal dimensions or locations of property ownership lines.

Nancy Rorick Consulting

- Irrigation pivot
- Well
- Existing
- From
- To
- 8" Plastic pipe
- Canal
- Road
- Stream
- Tax lot line
- Section line
- Quarter quarter section line

Application for a Water Right Transfer
Tax Lot 500
Certificate 41126, Priority 1966
Raymond Belnap

MEMO

To: Kristopher Byrd, Well Construction and Compliance Section Manager
From: Joel Jeffery, Well Construction Program Coordinator
Subject: Review of Water Right Application G-18909
Date: March 11, 2020

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

Applicant's Well #1 (MALH 943 and MALH 53992, the Deepening of MALH 943): Based on a review of the Well Reports, Applicant's Well #1 seems to protect the groundwater resource.

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