

Regular

RA

Name City of Banks
C/o Jolynn Becker
 Address 13680 NW Main St.
Banks, OR 97106
jbecker@cityofbanks.org

Change in APDA
 Date Filed 4/29/2024
 Initial notice date 5/7/2024
 DPD issued date
 PD issued date 9/16/2025
 PD notice date 9/16/2025
 Date of FO 12/30/2025 Vol 138 Page 238-243

C-Date
 COBU due date
 COBU Received date
 Certificate issued

DESCRIPTION OF WATER RIGHT(S)

Name of Stream A wellTrib. of West Fork Dairy Creek BasinUse Municipal UsesCounty Washington

Quantity of water (CFS)

No. of Acres

Name of ditch

App# G-15887Per # G-16312Cert # 95849PR Date 12/5/2002

App#

Per #

Cert #

PR Date

App#

Per #

Cert #

PR Date

App#

Per #

Cert #

PR Date

App#

Per #

Cert #

PR Date

FEES PAID

Date	Amount	Receipt #
<u>4-29-24</u>	<u>\$125.00</u>	<u>142818</u>
<u>4-28-24</u>	<u>3,890.00</u>	<u>142828</u>
<u>5-17-24</u>	<u>\$2,820.02</u>	<u>142942</u>

FEES REFUNDED

Date	Amount	Receipt #
------	--------	-----------

Assignments:

Irrigation District

Agent Bob Long
bob.long@cwrmh20.com

CWRE

CC's list City of Banks☐ - Oversized map - Location



Oregon

Tina Kotek, Governor

Water Resources Department

North Mall Office Building

725 Summer St NE, Suite A

Salem, OR 97301

Phone 503 986-0900

Fax 503 986-0904

December 30, 2025

Jolynn Becker
13680 NW Main St
Banks, OR 97106

REFERENCE: Transfer Application T-14450

Enclosed is a copy of the final order approving your water right transfer application.

The time allowed to complete the transfer is specified in the final order. YOU SHOULD GIVE PARTICULAR ATTENTION TO THE TIME LIMIT. The water right for any portion of the authorized change in character of use or change in place of use NOT carried out within the time allowed will be lost.

An extension of the time limit can be allowed only upon a showing that diligent effort has been made to complete the actual change(s) within the time allowed.

You are required to hire a Certified Water Rights Examiner (CWRE) to complete a Claim of Beneficial Use report and map which must be submitted to this Department within one year of the date you complete the change(s) or within one year of the completion date authorized in the transfer final order, whichever occurs first.

If you have any questions related to the approval of this transfer, you may contact your caseworker, Dante Luongo, by telephone at (971) 304-5006 or by e-mail at Dante.j.luongo@water.oregon.gov.

Sincerely,

David V. Jones Jr
Water Rights Services Support
Transfers and Conservation Section

cc: Jacob W. Constans, Watermaster Dist. # 18 (via email)
Bob Long, Agent

Enclosure

**BEFORE THE WATER RESOURCES DEPARTMENT
OF THE
STATE OF OREGON**

In the Matter of Transfer Application	)	FINAL ORDER
T-14450, Washington County	)	APPROVING ADDITIONAL POINTS OF
	)	APPROPRIATION

Authority

Oregon Revised Statutes (ORS) 537.705 and 540.505 to 540.580 establish the process in which a water right holder may submit a request to transfer the point of appropriation, place of use, or character of use authorized under an existing water right. Oregon Administrative Rules (OAR) Chapter 690, Division 380 implement the statutes and provides the Department's procedures and criteria for evaluating transfer applications.

Applicant

CITY OF BANKS
ATTN: JOLYNN BECKER
13680 NW MAIN ST
BANKS, OR 97106

Findings of Fact

1. On April 29, 2024, City of Banks ATTN: Jolynn Becker filed an application for additional points of appropriation under Certificate 95849. The Department assigned the application number T-14450.
2. Notice of the application for transfer was published on May 7, 2024, pursuant to OAR 690-380-4000. No comments were filed in response to the notice.
3. On February 7, 2025, the Department determined that the proposed additional points of appropriation (APOAs) would not develop the same aquifer as the authorized points of appropriation (POAs):
 - a) Authorized POA, WASH 62373 or Well-2, is 665 feet (ft) deep, with an open interval between 300 and 665 ft bls within the local Columbia River Basalt Group (CRBG) aquifer system. According to the WASH 62373 well log and additional documents provided by the applicant's agent, there are two principal water-bearing interflow zones in this well: 378-468 ft bls (est. 350 gpm) and 615-660 ft bls (est. 300 gpm).

This final order is subject to judicial review by the Court of Appeals under ORS 183.482. Any petition for judicial review must be filed within the 60-day time period specified by ORS 183.482(1). Pursuant to ORS 536.075 and OAR 137-003-0675, you may petition for judicial review or petition the Director for reconsideration of this order. A petition for reconsideration may be granted or denied by the Director, and if no action is taken within 60 days following the date the petition was filed, the petition shall be deemed denied.

- b) Transfer application T-14450 submitted documentation that provides additional information intended to support “the development of all basalt water bearing zones (WBZs) encountered to a depth of 665 feet below ground surface (bgs) as one aquifer unit.”
- c) OWRD has reviewed this additional documentation and concludes that it does **not** support the applicant’s request to consider “all basalt WBZs encountered to a depth of 665 feet bgs as one aquifer unit.” Instead, OWRD finds the preponderance of the evidence supports a finding that the two WBZs in WASH 62373 are discretely different aquifer sources:
 - i) The spinner log instrumentation in WASH 62373 has a low-flow measurement threshold of <1.0 ft/minute. This threshold would equate to a potential vertical flow in the borehole of approximately 6 gallons per minute (gpm). This flow rate could exist within the borehole without being detectable by the spinner log instrumentation used for the survey of WASH 62373. The presence of any vertical flow in a borehole under otherwise static conditions indicates a head differential between successive WBZ, which, indicates that each WBZ behaves as a separate “aquifer.”

Because vertical flow might exist in WASH 62373 that is below the threshold detection limit of the spinner log device, the interpreted results of this survey do not prove conclusively that the two primary WBZ in this well (378-468 ft bls and 615-660 ft bls) behave as “one aquifer unit.”

- ii) The application attachment shows that well logs for WASH 62373, nearby WASH 50693, and other nearby basalt wells did not indicate changes in static water levels as the wells were being drilled through multiple water bearing zones. If present, such head changes would indicate a vertical gradient and resultant vertical flow between WBZs, which in turn would imply that each WBZ was a discretely different aquifer. Conversely, no head changes between WBZ would suggest a single aquifer unit.

However, while head changes observed during drilling can be an indication of different aquifers/discrete WBZs, particularly if the change is relatively large, the absence of such observed changes is not conclusive proof of a single “aquifer unit” comprised of multiple WBZs, for the following reasons:

- (1) in cases where head differences between WBZs are relatively small (e.g., 1-2 feet), the differences may not be discernible during disruptive drilling activities;
 - (2) when drilling through multiple WBZs, the head in the well becomes a composite of various heads under dynamic conditions (with interflow occurring through the borehole); thus it can be impossible to quantify, or even discern, any head changes attributable to a single WBZ;
 - (3) pumping of other nearby CRBG wells could affect water levels measured in the well borehole.

- iii) After recently completing an elevation survey of the wellheads of both WASH 7651 and WASH 62373, the application states that static water level elevations between the wells “differed by 0.62 – 1.12 feet.” This range is comprised of three rounds of contemporaneous measurements made in 2023. A similar range of head differences between WASH 7651 and WASH 62373 was measured more recently in February and March of 2024, at 0.7 ft and 1.0 ft, respectively.
 - iv) As reported to OWRD, these measurements were made when the WASH 62373 pump had been idle for at least 24 hours for the February reading, and at least 7 days for the March measurement. The range of reported static water level differences between WASH 7651 and WASH 62373 indicates the presence of a vertical gradient between the two major WBZ intersected by the wells. This vertical gradient in turn indicates that the two WBZ in WASH 62373 behave as discrete aquifers as defined by different head conditions.
 - d) Despite the authorization of WASH 62373 as a POA for certificate 95849 in its current configuration, obtaining groundwater from two discrete aquifers within the CRBG aquifer system, any APOA wells installed under this transfer application will be limited to only one of the two primary aquifers/WBZ present in WASH 62373.
- 4. On February 7, 2025 the Department determined that the comingling of aquifers can be avoided by implementing the changes to planned construction of the proposed APOA wells which will limit the wells to only a single WBZ.
 - 5. On March 28, 2025, the applicant provided a memorandum responding to OWRD’s February 27, 2025 Groundwater Review. The memorandum provided further evidence that the two WBZ’s identified constitute a single aquifer system.
 - 6. On June 13, 2025, the Department responded to the applicant, and the data analysis provided, and determined that the two water bearing zones developed by the applicant’s current authorized well constitute a single aquifer with two primary basalt WBZ’s between -125 ft and -430 ft msl. A revised Groundwater review, dated July 3, 2025, documents this determination.
 - 7. On July 24, 2025, the Department sent a copy of the draft Preliminary Determination to the applicant, proposing to approve Transfer Application T-14450. The draft Preliminary Determination cover letter provided a deadline of August 23, 2025, for the applicant to respond and submit the required information. The applicant requested that the Department proceed with issuance of a Preliminary Determination and provided the necessary information to demonstrate that the applicant is authorized to pursue the transfer.
 - 8. On August 8, 2025, the applicant’s agent requested an extended completion date of October 1, 2045, and provided a detailed plan of the city’s timeline to complete the changes, citing aquifer storage recovery testing, available funding, and completing intensive infrastructure work.

9. On September 16, 2025, the Department issued a Preliminary Determination proposing to approve Transfer Application T-14450 and sent a copy to the applicant. Additionally, notice of the Preliminary Determination for the transfer application was published in the Department's weekly notice on September 16, 2025, and in the Hillsboro Tribune newspaper on September 26 and October 3, 2025, pursuant to ORS 540.520 and OAR 690-380-4020. No protests were filed in response to the notice.

10. The right to be transferred is as follows:

Certificate: 95849 in the name of CITY OF BANKS (perfected under Permit G-16312)
Use: MUNICIPAL USE
Priority Date: DECEMBER 5, 2002
Rate: 1.0 CUBIC FOOT PER SECOND
Period of Use: YEAR ROUND
Source: WELL 2 (WASH 62373) in WEST FORK DAIRY CREEK BASIN

Authorized Point of Appropriation:

Twp	Rng	Mer	Sec	Q-Q	Measured Distances
2 N	3 W	WM	31	NE NW	WELL 2 (WASH 62373) - 120 FEET SOUTH AND 2070 FEET EAST FROM THE NW CORNER OF SECTION 31

Authorized Place of Use:

MUNICIPAL USE
WITHIN THE SERVICE BOUNDARY OF THE CITY OF BANKS

11. Transfer Application T-14450 proposes additional points of appropriation located:

Twp	Rng	Mer	Sec	Q-Q	Measured Distances	Approximate distance from the Authorized Point of Appropriation
2 N	3 W	WM	31	NE NE	AN - 275 FEET SOUTH AND 475 FEET WEST FROM NE CORNER, SECTION 31	2800 FEET EAST
2 N	3 W	WM	31	NE SE	AS - 2500 FEET NORTH AND 565 FEET WEST FROM THE SE CORNER OF SECTION 31	3745 FEET SOUTHEAST
2 N	3 W	WM	31	NE SW	PARK-A - 2120 FEET NORTH AND 2970 FEET WEST FROM THE SE CORNER OF SECTION 31	3160 FEET SOUTH
2 N	3 W	WM	31	NW SE	PARK-B - 2460 FEET NORTH AND 2520 FEET WEST FROM THE SE CORNER OF SECTION 31	2920 SOUTHEAST
2 N	3 W	WM	31	NW SE	PARK-C - 2630 FEET NORTH AND 2540 FEET WEST FROM THE SE CORNER OF SECTION 31	22750 FEET SOUTHEAST
2 N	4 W	WM	36	NE NE	WTP - 175 FEET SOUTH AND 335 FEET WEST FROM THE NW CORNER OF SECTION 31	2220 FEET WEST

Transfer Review Criteria [OAR 690-380-0100(14), OAR 690-380-4010(2), OAR and OAR 690-380-2110(2)]

12. Water has been used within the last five years according to the terms and conditions of the right. There is no information in the record that would demonstrate that the right is subject to forfeiture under ORS 540.610.
13. A water delivery system sufficient to use the full amount of water allowed under the existing right was present within the five-year period prior to submittal of Transfer Application T-14450.
14. The water right is subject to transfer as defined in ORS 540.505(4) and OAR 690-380-0100(14).
15. The proposed points of appropriation develop groundwater from the same aquifer as the authorized point of appropriation, as required by OAR 690-380-2110(2).
16. The proposed change, as conditioned, would not result in enlargement of the right.
17. The proposed change, as conditioned, would not result in injury to other existing water rights.
18. All other application requirements are met.

Conclusion of Law

The additional points of appropriation proposed in Transfer Application T-14450 are consistent with the requirements of ORS 537.705 and 540.505 to 540.580 and OAR 690-380-5000.

Now, therefore, it is ORDERED:

1. The additional points of appropriation proposed in Transfer Application T-14450 are approved.
2. The right to the use of the water is restricted to beneficial use at the place of use described and is subject to all other conditions and limitations contained in Certificate 95849 and any related decree.
3. Approval of this transfer application does not constitute nor grant legal access onto or through another person's property for purposes of accessing the new points of appropriation.
4. Water right Certificate 95849 is cancelled.
5. The quantity of water diverted at the new additional points of appropriation (AN, AS, PARK-A, PARK-B, PARK-C, and WTP), together with that diverted at the original point of

appropriation (WELL 2 (WASH 62373)), shall not exceed the quantity of water lawfully available at the original point of appropriation (WELL 2 (WASH 62373)).

6. Water shall be acquired from the same aquifer (water source) as the original point of appropriation. This aquifer is located -125 ft to -430 ft msl within the CRBG.
7. Water use measurement conditions:
 - a. Before water use may begin under this order, the water user shall install a totalizing flow meter, or, with prior approval of the Director, another suitable measuring device, at each point of appropriation (new and existing).
 - b. The water user shall maintain the meters or measuring devices in good working order.
 - c. The water user shall allow the Watermaster access to the meters or measuring devices; provided however, where the meters or measuring devices are located within a private structure, the Watermaster shall request access upon reasonable notice.
8. Full beneficial use of the water shall be made, consistent with the terms of this order, on or before **October 1, 2045**. A Claim of Beneficial Use prepared by a Certified Water Right Examiner shall be submitted by the applicant to the Department within one year after the deadline for completion of the changes and full beneficial use of the water.
9. After satisfactory proof of beneficial use is received, a new certificate confirming the right transferred will be issued.

Dated in Salem, Oregon on DEC 30, 2025



Lisa J. Jaramillo, Transfer and Conservation Section Manager, for
IVAN GALL, DIRECTOR
Oregon Water Resources Department

Mailing Date: DEC 31, 2025

WATER RIGHT TRANSFER COVER SHEET

Transfer: T-14450

Transfer Specialist:

Transfer Type: Regular Transfer

Reimbursement Authority? ☒

Dante L.

Applicant: Jolynn Becker 13680 NW Main St Banks, OR 97106	Agent: Bob Long 311 B Ave, Suite P Lake Oswego, OR 97034	Receiving Landowner:
Current Landowner if other than Applicant:	CWRE:	Irrigation District:
Affected Local Gov'ts:	Affected Tribal Gov't:	BOR Notified (date):

Water Rights Affected

File Marked	App. File # or Decree Name	Permit	Certificate	RR/CR Needed	RR/CR Nos.
☐				☐ Yes ☐ No	
☐				☐ Yes ☐ No	
☐				☐ Yes ☐ No	

Key Dates & Initial Actions (Support Staff)

Rec'd: April 29, 2024	Proposed Action(s): ADDITIONAL POINT OF APPROPRIATION	
Fees Pd: 3890.00	Acknowledgement Letter Sent ☒	Basin: 2 Willamette
Initial Public Notice: 5/7/2024	County sent cc: of Ack Letter ☒	County: WASHINGTON
WM District: 18 Jacob W. Constans	WM Review request sent:	WM Review date received:
ODFW District:	ODFW Review sent:	ODFW Review date received:
Groundwater	GW Review sent:	GW Review date received:

Caseworker Actions: Newspaper & PD Notice:

Newspaper notice needed: ☐	Name of Newspaper:
Newspaper notice sent to coordinator:	Newspaper notice quote requested (NRS1):
Request for news \$ sent:	News \$ received:
Affidavit of publication received:	Last day of publication:

Peer Review:

Document	Drafted	Peer Review	Coordinator	Changes Made	Signature Bin	Signature Date
DPD	Date: <u>7-7-25</u> Initials: <u>AL</u>	Date: <u>7-9-25</u> Initials: <u>SG</u>	Date: <u>8-26-25</u> Initials: <u>CC</u>	Date: <u>8-27-25</u> Initials: <u>AL</u>	CW Sent: _____ WM Sheet ☒ ODFW Sheet: ☐	N/A
PD	Date: <u>9-6-25</u> Initials: <u>AL</u>	Date: <u>9-7-25</u> Initials: <u>RF</u>	Date: <u>9-8-25</u> Initials: <u>TS</u>	Date: <u>9-11-25</u> Initials: <u>AL</u> Data Review Date: <u>9-12-25</u>	Date: _____	Date: _____
FO	Date: <u>9-18-25</u> Initials: <u>AL</u>	Date: <u>9-24-25</u> Initials: <u>RF</u>	Date: <u>9-25-25</u> Initials: <u>TS</u>	Date: <u>9-26-25</u> Initials: <u>AL</u>	Date: <u>12-18-25</u> No. of docs for sig: <u>1</u>	Date: <u>12/30/2025</u>

Special Issues: _____

Special Order Volume: Vol. 138 Pages 238-243

STATE OF OREGON
WATER RESOURCES DEPARTMENT

725 Summer St. N.E. Ste. A
SALEM, OR 97301-4172
(503) 986-0900 / (503) 986-0904 (fax)

RECEIPT # 145975

INVOICE # _____

RECEIVED FROM: City of Banks
BY: _____

APPLICATION	
PERMIT	
TRANSFER	T-14450

CASH: ☐ CHECK:# 28194 OTHER: (IDENTIFY) ☐

TOTAL REC'D \$ 88.49

1083 TREASURY 4170 WRD MISC CASH ACCT

0407 COPIES 46118 \$
0207 OTHER: (IDENTIFY) Newspaper Notice \$ 88.49
0243 I/S Lease _____ 0244 Muni Water Mgmt. Plan _____ 0245 Cons. Water _____

4270 WRD OPERATING ACCT

MISCELLANEOUS

0407	COPY & TAPE FEES	\$
0410	RESEARCH FEES	\$
0408	MISC REVENUE: (IDENTIFY) _____	\$
TC162	DEPOSIT LIAB. (IDENTIFY) _____	\$
0240	EXTENSION OF TIME	\$

WATER RIGHTS:

	EXAM FEE		RECORD FEE
0201	\$	0202	\$
0203	\$	0204	\$
0205	\$		

WELL CONSTRUCTION

	EXAM FEE		LICENSE FEE
0218	\$	0219	\$
		0220	\$

LANDOWNER'S PERMIT

OTHER (IDENTIFY) _____

0536 TREASURY 0437 WELL CONST. START FEE

0211	WELL CONST START FEE	\$	CARD#
0210	MONITORING WELLS	\$	CARD#
	OTHER (IDENTIFY) _____		

0607 TREASURY 0467 HYDRO ACTIVITY LIC NUMBER

0233	POWER LICENSE FEE (FW/WRD)	\$
0231	HYDRO LICENSE FEE (FW/WRD)	\$
	HYDRO APPLICATION	\$

TREASURY OTHER / RDX

FUND _____ TITLE _____

OBJ. CODE _____ VENDOR # _____

DESCRIPTION _____

\$

RECEIPT: 145975

DATED: 9-2-25 BY: [Signature]

Distribution - White Copy - Customer, Yellow Copy - Fiscal, Blue Copy - File, Buff Copy - Fiscal



PO Box 310 Gresham, OR 97030
Phone: 503-684-0360 Fax: 503-620-3433
E-mail: legals@commnewspapers.com

AFFIDAVIT OF PUBLICATION

State of Oregon, County of Washington, ss
I, Deseri Cerruti, being first duly sworn, de-
pose and say that I am the Principal Clerk
of the News Times, a newspaper of general
circulation, published in Washington County,
Oregon, as defined by ORS 193.010 and
193.020, that

SEE EXHIBIT A

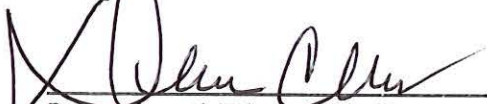
Ad#: 366945

**Owner: Oregon Water Resources Depart-
ment**

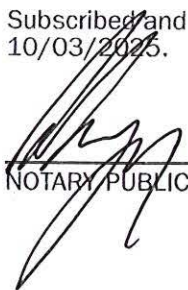
**Description: Notice of Preliminary Determi-
nation for
Water Right Transfer T-14450**

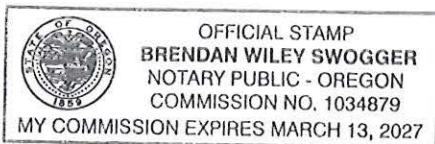
A copy of which is hereto annexed, was
published in the entire issue of said
newspaper for 2 week(s) in the
following issue:

09/26/2025, 10/03/2025


Deseri Cerruti (Principal Clerk)

Subscribed and sworn to before me this
10/03/2025.


NOTARY PUBLIC FOR OREGON



Acct #: 150076

Attn: DAVID JONES JR

OREGON WATER RESOURCES DEPARTMENT
725 SUMMER ST. NE, SUITE A
SALEM, OR 97301

Received
OCT 14 2025
OWRD

EXHIBIT A

Notice of Preliminary Determination for Water Right Transfer T-14450

T-14450 filed by City of Banks ATTN: Jolynn Becker 13680 NW Main St Banks, OR 97106, proposes additional points of appropriation under Certificate 95849. The right allows the use of 1.0 cubic foot per second from a well in Sec. 31, T2N, R3W, WM for municipal use within the service boundary of the City of Banks. The applicant proposes five additional points of appropriation within Sec. 31, T2N, R3W, WM and one additional point of appropriation in Sec. 36, T2N, R4W, WM. The Water Resources Department proposes to approve the transfer, based on the requirements of ORS Chapter 540 and OAR 690-380-5000.

Any person may file, jointly or severally, a protest or standing statement within 30 days after the last date of newspaper publication of this notice, October 3, 2025. Call (503) 986-0935 to obtain additional information. If no protests are filed, the Department will issue a final order consistent with the preliminary determination.

Published Sept. 26, Oct. 3, 2025.

FGNT/HT366945

Received
OCT 14 2025
OWRD

Groundwater Transfer Review Summary Form

Transfer/PA # T- 14450

GW Reviewer Dennis Orlowski Date Review Completed: July 3, 2025

Summary of Same Source Review:

☐ The proposed change in point of appropriation is not within the same aquifer as per OAR 690-380-2110(2).

NOTE: this re-review revisits a previous finding of "not within the same aquifer" that was concluded in the original T-14450 review completed on February 7, 2025. The rationale for this revised conclusion is summarized in Section 2 of this re-review.

Summary of Water Level Decline Condition Review:

☐ Water levels at the original point(s) of appropriation have exceeded the allowed decline threshold defined by conditions in the originating water right.

Summary of Injury Review:

☐ The proposed transfer will result in another, existing water right not receiving previously available water to which it is legally entitled or result in significant interference with a surface water source as per 690-380-0100(3).

Summary of GW-SW Transfer Similarity Review:

☐ The proposed SW-GW transfer doesn't meet the definition of "similarly" as per OAR 690-380-2130.

This is only a summary. Documentation is attached and should be read thoroughly to understand the basis for determinations.



Oregon Water Resources Department
725 Summer Street NE, Suite A
Salem, Oregon 97301-1271
(503) 986-0900
www.wrd.state.or.us

Ground Water Review Form:

- ☒ Water Right Transfer
☐ Permit Amendment
☐ GR Modification
☐ Other

Application: T-14450

Applicant Name: City of Banks

Proposed Changes: ☐ POA ☒ APOA ☐ SW→GW ☒ RA
☐ USE ☐ POU ☐ OTHER

Reviewer(s): Dennis Orlowski

Date of Review: July 3, 2025 (re-review)

Date Reviewed by GW Mgr. and Returned to WRSD: JTI 7/3/25

The information provided in the application is insufficient to evaluate whether the proposed transfer may be approved because:

- ☐ The water well reports provided with the application do not correspond to the water rights affected by the transfer.
- ☐ The application does not include water well reports or a description of the well construction details sufficient to establish the ground water body developed or proposed to be developed.
- ☐ Other _____

1. Basic description of the changes proposed in this transfer: **This re-review supersedes the original review completed on February 7, 2025.**

This proposed transfer relates to certificate 95849, which authorizes groundwater pumped from a single authorized POA (WASH 62373, "Well-2") for municipal uses by the City of Banks (maximum instantaneous pumping rate of 1.0 cfs, ~449 gpm).

This transfer proposes to add the following APOA to certificate 95849 (note that all of the proposed APOA are proposed to-be-drilled (TBD) well locations):

- WTP (Water Treatment Plant) well – TBD
- AN (Aerts Rd North) well – TBD
- AS (Aerts Rd South) well – TBD
- Park-A (Park Primary) well – TBD
- Park-B (Park Alternative) well – TBD
- Park-C (Park Alternative) well – TBD

NOTE: the authorized POA for certificate 95849, WASH 62373, is also a currently-proposed APOA for permit G-7593, which authorizes groundwater from a single POA (WASH 7651) for municipal uses by the City of Banks (WASH 7651, "Well-1", is located about 60 feet away from WASH 62373). This proposed change for WASH 62373 is part of transfer application T-14449, which as of this date is under review by OWRD.

2. Will the proposed POA develop the same aquifer (source) as the existing authorized POA?

☒ Yes (see comments) ☒ No Comments: Authorized POA WASH 62373 ("Well-2") is 665 feet deep, with an open interval between 300 and 665 ft bls within the local Columbia River Basalt Group (CRGB) aquifer system. According to the WASH 62373 well log and additional documents provided by the applicant's agent (CwM-H2O, 2018), there are two principal water-bearing zones (WBZ) in this well: 378-468 ft bls and 615-660 ft bls.

Planned construction details for the six proposed (TBD) APOA show anticipated total well depths ranging between approximately 650 to 750 feet, with cased and sealed intervals from 0 to about 200-250 ft bls.

Previous Conclusion – Source Determination

OWRD's previous conclusion for the T-14450 application was that despite the authorization of WASH 62373 as a POA for certificate 95849, in its current configuration the well was assumed to commingle two separate aquifers within the CRBG system (i.e., obtains groundwater from two presumably discrete WBZ positioned at approximately -125 to -250 ft msl and -320 to -430 ft msl in WASH 62373).

Consequently, the original T-14450 review stipulated that any new APOA authorized by this transfer would be limited to obtaining groundwater from only one of the two WBZ present in WASH 62373. This conclusion was based largely on past information provided for WASH 62373 by the applicant, much of which was deemed to be inconclusive, incomplete, and/or contradictory (as summarized below and in the previous T-14450 review).

Additional Information and Assessment

After completion of the first review for T-14450, OWRD (1) re-evaluated additional information provided by the applicant's agent subsequent to the first review and (2) assessed longer-term water level trends in the CRBG aquifer system throughout most of the entire Tualatin Valley in an effort to improve understanding of groundwater conditions near Banks.

The following list summarizes key factors re-evaluated by OWRD that led to the revised conclusion provided in this re-review:

- (1) Retraction of previous determination by the applicant's agent that a downhole video survey of WASH 62373 ("Well 2") did indeed show exchange of water between the two WBZ, thus indicating two discretely different aquifer sources (CwM-H2O, 2018).
 - An attachment to the T-14449 and T-14450 applications claimed that their original interpretation of the video survey was incorrect, and that "there is no evidence from the video survey of water movement in either direction", thus concluding "that the two WBZs share very similar hydraulic pressure regimes under static conditions."
 - Since completion of the first review, OWRD was provided with and examined this same video from WASH 62373, in addition to another video of WASH 50693 (the nearby Quail Valley Golf Course well with similar construction). OWRD concludes that this particular video evidence alone was insufficient to discern any predominant vertical flow direction within WASH 62373 (or WASH 50693), primarily because camera pause times were not long enough to allow turbulence caused by the vertical movement of the camera to diminish (i.e., remnant turbulent flow resulted in movement of suspended particles in generally haphazard directions).

(2) Recent provision of additional static water-level data from WASH 7651 and WASH 62373.

- WASH 7651 ("Well 1") is another City of Banks well that is located only about 60 feet from WASH 62373 ("Well 2"). WASH 7651 is much shallower at 450 feet deep, and obtains groundwater from only the uppermost of the two primary WBZ present in WASH 62373. Historically, water level (or head) differences reported for the two wells have ranged from 15+ feet to several feet. Head differences of this magnitude are typically strong evidence that the wells tap different WBZ under markedly different hydraulic conditions, and thus each WBZ would typically be considered by OWRD to be a separate aquifer/source (OAR 690-200-0050)
- To note, even the T-14449 application listed a head difference of 2.2 feet between WASH 7651 and WASH 62373, a magnitude which strongly suggests the wells tap discretely different aquifer sources.
- Recently provided static water-level data of improved reliability indicates much smaller head differences on the order of ~0.2 to ~1 foot. While *any* head difference would suggest two different sources under different hydraulic head conditions, the generally very dynamic CRBG aquifer system in and near Banks was taken into account by OWRD for this re-evaluation (i.e., the smaller head differences might reflect transient levels between drawdown and recovery phases, despite the contention they are truly "static"). Consequently, *while also not entirely conclusive alone*, the more recent water-level measurements show much smaller differences compared to data previously provided to OWRD, and thus better support a determination of single source.

(3) Recent provision of static and dynamic spinner log survey results to OWRD.

- After completion of the first review, OWRD was provided with the results of static and dynamic spinner log surveys completed in both WASH 62373 ("Well 2") and nearby WASH 50693 (Quail Valley Golf Course well). The applicant's agent claimed the survey results suggested that (1) no vertical flow was occurring in either well, thus (2) there was no head differential between the shallow and deep WBZ, and therefore (3) the two WBZ constituted a single source aquifer.
- However, accuracy limitations of the spinner log instrumentation used for these surveys indicate that approximately 3 gpm of vertical flow could exist within the well *without* being detected by the instrumentation. The presence of *any* vertical flow in a well under static/non-pumping conditions indicates a head differential between successive WBZ, which in turn indicates that each WBZ behaves as a separate aquifer/source.
- Thus, the spinner log results *alone* are not conclusive proof a single aquifer determination, but were useful by (1) establishing relative flow contributions from each of the two key basalt interflows, and (2) effectively quantifying much additional flow from major fracture zones *apart from the basalt interflows* (as identified in the WASH 62373 and WASH 50693 well videos).

(4) OWRD assessment of long-term water-level trends in CRBG wells throughout much of the Tualatin Valley.

- Historic (~20-50 year) water-level data from many CRBG wells located throughout the Valley, with variable completion depths and elevations, exhibit (1) generally similar trends and (2) a generalized grouping of levels (heads) into two elevation zones: ~120-150 ft msl and ~180-200 ft msl. These aspects suggest a moderate to high degree of aquifer connectivity between many CRBG wells throughout the Valley.
- Static water-level measurements from both WASH 7651 ("Well 1") and WASH 62373 ("Well 2") fall within the uppermost of these two head groupings. Recently reported head differences for those two wells have been relatively small when compared to the roughly 30-foot range used to define the upper grouping. OWRD's broader assessment of much more available data suggests that CRBG "aquifer" designations within the Valley might be defined more appropriately by head groupings (with relatively minor fluctuations within each grouping), as opposed to being defined as a singular basalt interflow, the presence of which is typically inferred only from well log descriptions.

(Note: additional supporting documentation provided by another consultant (Summit Water Resources, 2025) made reference to spinner log and temperature survey results that "...resulted in a single aquifer determination within the CRBG at the following locations in the Tualatin Basin:

- City of Beaverton: ASR 5, 2016
- City of Beaverton: ASR 7, 2020.
- City of Tigard: ASR 3, 2014.
- City of Cornelius, ASR well, 2017."

The open intervals for the above wells range from 384 to 998 feet, with multiple basalt interflows/WBZ present in each interval.

Despite the consultant's reference, it is not applicable to invoke downhole survey activities performed at these wells as a precedent for decision making for the Banks wells. The Beaverton and Tigard ASR wells are located within the Cooper Mountain-Bull Mountain Critical Groundwater Area (CGWA) located about 16-18 miles southeast of Banks. The order establishing that CGWA directs OWRD to manage the entire CRBG system with the CGWA as a **single groundwater source**. This directive has been a key factor when OWRD considers how to manage ASR storage and recovery wells within the CGWA.

Thus, the results of spinner, temperature and video surveys conducted in those particular ASR wells was not considered by OWRD as necessary to determine whether or not commingling of discretely-different WBZ exists, because OWRD treats the entire CRBG aquifer *within the CGWA* as a single source. Instead, those surveys were required to better inform and manage ASR activities, including storage accounting and where injection and recovery can occur (i.e., within specific interflows). Therefore, these same types of survey activities performed in the ASR wells located within the CGWA were done for different purposes, and thus should not be considered directly applicable to the Banks' wells in which assessing potential commingling of different WBZ was the primary objective.

The Cornelius ASR well is not within the Cooper Mountain-Bull Mountain CGWA. However, this well (WASH 73617) is relatively very deep (1589 ft), much deeper than almost all other CRBG wells in the Valley and thus highly unlikely to affect those other wells).

Revised Conclusion – Source Determination

After evaluating the additional information provided by the applicant and also conducting a broader assessment of aquifer conditions using historic regional data, the preponderance of evidence indicates the two water-bearing zones (WBZ) developed to date by the City of Banks in WASH 62373 (“Well 2”) constitute a single aquifer (same source) for the purposes of meeting minimum well construction standards and managing basalt groundwater resource in the vicinity of Banks.

At this time OWRD finds that the preponderance of evidence indicates that the authorized POA WASH 62373 and the proposed APOA (to-be-drilled) will obtain groundwater from the same groundwater source.

To ensure that each proposed APOA obtains groundwater only from the currently-authorized aquifer source, the GW Section recommends conditioning the transfer so that all of the proposed APOA wells be limited to accessing only the two primary basalt WBZ present between approximate elevations -125 to -430 ft msl (which is based on the two general WBZ identified in WASH 62373 (“Well 2”) and nearby WASH 50693 (QVGC well)).

The following technical analyses were completed assuming these construction limitations will be applied to the proposed APOA wells.

3. a) Is the existing authorized POA subject to a water level decline condition?

☒ Yes ☐ No

Comments: Certificate 95849 has several decline conditions common to CRBG aquifer wells in the Willamette Basin.

b) If yes, for each POA identify the reference level, most recent spring-high water level, and whether an applicable permit decline condition has been exceeded: A reference level for WASH 62373, or a method for prescribing one, is not stipulated in certificate 95849. However, superseded permit G-16312 states that “use of water from a new well shall not begin until an initial static water level in the well has been measured and reported to the Department.”

The first plausible measurement reported to OWRD for WASH 62373 was from 5/25/2005 (48.0 ft bls (~elevation 184 ft msl)), which preceded the 4/28/2008 permit date by several years. However, the March 2009 aquifer test of WASH 62373 shows a similar static level of about 50 ft bls. Consequently, from this information a reference static water level for WASH 62373 is established at 48.0 ft bls (note that recent static levels reported to OWRD from March of 2023 and 2024 have been higher at ~35-40 ft bls; these higher levels reflect long-term recovery trends observed in the CRBG aquifer system throughout much of the Tualatin Valley).

- WASH 62373 reference level: 48.0 ft bls.
- Most recent spring high water level: 39.13 ft bls (3/1/2024).
- No exceedances of permit decline conditions.

4. a) Is there more than one source developed under the right (e.g., basalt and alluvium)?

☐ Yes ☒ No

Comments: As discussed in Section 2 of this review, at this time OWRD concludes that the authorized POA and proposed APOA – assuming recommended well construction limitations presented in d Section 8 of this review are adopted - will obtain groundwater from the same source.

b) If yes, estimate the portion of the right supplied by each of the sources and describe any limitations that will need to be placed on the proposed change (rate, duty, etc.): N/A

5. a) Will this proposed change, at its maximum allowed rate of use, likely result in an increase in interference with another ground water right?

☒ Yes ☐ No Comments: Relative to the location of authorized POA WASH 62373, several of the proposed APOA locations are nearer to existing groundwater rights. Thus, this proposed change will likely result in an increase in interference with those rights.

b) If yes, would this proposed change, at its maximum allowed rate of use, likely result in another groundwater right not receiving the water to which it is legally entitled?

☐ Yes ☒ No If yes, explain: A representative proposed APOA location was evaluated for potential injury to applicable existing groundwater rights. For this evaluation, the Theis distance-drawdown analysis was performed to estimate the degree of additional interference at the nearest applicable existing well (Theis, 1935). The ranges of aquifer parameter values used were derived primarily from results of a 2009 aquifer test completed in proposed APOA WASH 62373 (Golder Associates, 2009) and in another separate test of WASH 50693 (QVGC well), as well as published values (Conlon et al., 2005; Gannett and Caldwell, 1998).

In lieu of evaluating injury potentially caused by all six of the proposed APOA, a likely "worst case" scenario was instead evaluated. This scenario consists of pumping from the proposed "AN Well" location, which is relatively near to existing wells that obtain groundwater primarily from common WBZ: WASH 79189 and WASH 56924 (see attached cross-section). Furthermore, because the same "AN Well" location (as well as WASH 62373) was also proposed as an APOA in transfer application T-14449, that well could be authorized to pump a stacked rate of 1.67 cfs (equal to 0.67 cfs from T-14449/permit G-7593, plus 1.0 cfs from this application T-14450/certificate 95849).

(Note that there are several known wells relatively close to the proposed location for the "WTP Well"; however, current OWRD records indicate that these particular wells are owned by the City of Banks, and are associated with irrigation of school grounds (WASH 77871, WASH 7628, WASH 7621, WASH 3184). Consequently, it is assumed that the City can manage potential adverse interference to these existing wells resulting from pumping at the "WTP Well" location).

Relative to the location of authorized POA WASH 62373, the proposed location for the "AN Well" is about 2700 feet nearer to WASH 79189. The results of the Theis interference analysis indicates that additional interference in WASH 79189 could potentially range from about 10 to 50 feet due to pumping the stacked maximum rate (1.67 cfs) 24/7/365 from the "AN Well" (see attached Theis analysis results).

Limited water level data from another nearby similar well (WASH 56924) indicates that the static water level in WASH 79189 likely ranges from about elevation 180 to 200 ft msl, which would provide roughly 200 feet or more of available drawdown in both it and existing wells of similar completion. This approximate range of available drawdown should be sufficient to support ongoing usage of these wells with the change proposed by this application (i.e., the change will not prevent those wells from receiving the groundwater to which they are legally entitled).

The results of the potential injury evaluation suggests that relatively moderate (~10-50 feet) levels of additional drawdown might be imposed in some area wells due to pumping of the "AN Well", and possibly at other proposed APOA locations. It should be noted, however, that these estimates were completed using very conservative operational parameters for the Theis analytical drawdown method: pumping a single well at the full allocated rate (and in this case a stacked rate) for 24 hours a day, 7 days a week, 365 days a year. Actual pump operation will likely not be this sustained, and/or could be rotated to different locations to distribute overall pumping stresses to the CRBG aquifer system.

Furthermore, from the 2009 aquifer test of WASH 62373 ("Well 2") during which that well was pumped continuously for 47 hours at 465 gpm (~1 cfs), a total of 77 feet of drawdown was observed in adjacent WASH 7651 ("Well 1"), and only 2 feet in WASH 50693 (QVGC well) which is located about 3200 feet from WASH 62373. The results from the aquifer test generally confirm the conservative approach used for the Theis drawdown assessments, and that actual additional drawdown might be somewhat less than predicted, particularly for wells that penetrate the deeper of the two primary WBZ.

6. a) Will this proposed change, at its maximum allowed rate of use, likely result in an increase in interference with **another surface water source**?

☐ Yes ☒ No Comments: With the planned cased and sealed depth of about 200-250 feet for the proposed APOA not yet drilled, and 300 feet for WASH 62373, water-bearing interflow zone(s) will likely be from many tens to perhaps hundreds of feet below any nearby stream reaches. Consequently, it is unlikely that the proposed change would result in an increase in interference with local surface water sources.

b) If yes, at its maximum allowed rate of use, what is the expected change in degree of interference with any **surface water sources** resulting from the proposed change?

Stream: _____ ☐ Minimal ☐ Significant

Stream: _____ ☐ Minimal ☐ Significant

Provide context for minimal/significant impact: N/A

7. For SW-GW transfers, will the proposed change in point of diversion affect the surface water source similarly (as per OAR 690-380-2130) to the authorized point of diversion specified in the water use subject to transfer?

☐ Yes ☒ No Comments: N/A

8. What conditions or other changes in the application are necessary to address any potential issues identified above: To ensure that each proposed APOA obtains groundwater only from the currently-authorized aquifer source, the GW Section recommends conditioning the transfer so that all of the proposed APOA wells be limited to accessing only the two primary basalt WBZ present between approximate elevations -125 to -430 ft msl (which is based on the two general WBZ identified in WASH 62373 ("Well 2") and nearby WASH 50693 (QVGC well)).

9. Any additional comments: None

References

Applications: T-14450 RA, T-14449 RA

Conlon, T.D., Wozniak, K.C., Woodcock, D., Herrera, N.B., Fisher, B.J., Morgan, D.S., Lee, K.K., and Hinkle, S.R., 2005, *Ground-water hydrology of the Willamette Basin, Oregon*, Scientific Investigations Report 2005-5168: U. S. Geological Survey, Reston, VA.

CwM-H2O, 2018. Banks-Green Mountain Aquifer Storage and Recovery Feasibility Study, prepared for City of Banks

Freeze, R.A. and Cherry, J.A., 1979, *Groundwater*, Prentice Hall, Englewood Cliffs, New Jersey, 604 p.

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

Golder Associates, 2009. Technical Memorandum: March 2009 Well #2 Aquifer Test Data Analysis.

Personal communication (also provided instrument specifications), Mike Schumacher (Pacific Surveys) to Justin Iverson (OWRD), January 24, 2025.

Theis, C.V., 1935, The relation between the lowering of the piezometric surface and the rate and duration of discharge of a well using groundwater storage, *American Geophysical Union Transactions*, vol. 16, p. 519-524.

United States Geological Survey, 2013, National Elevation Dataset (NED) [DEM geospatial data]. 1/9th arc-second, updated 2013.

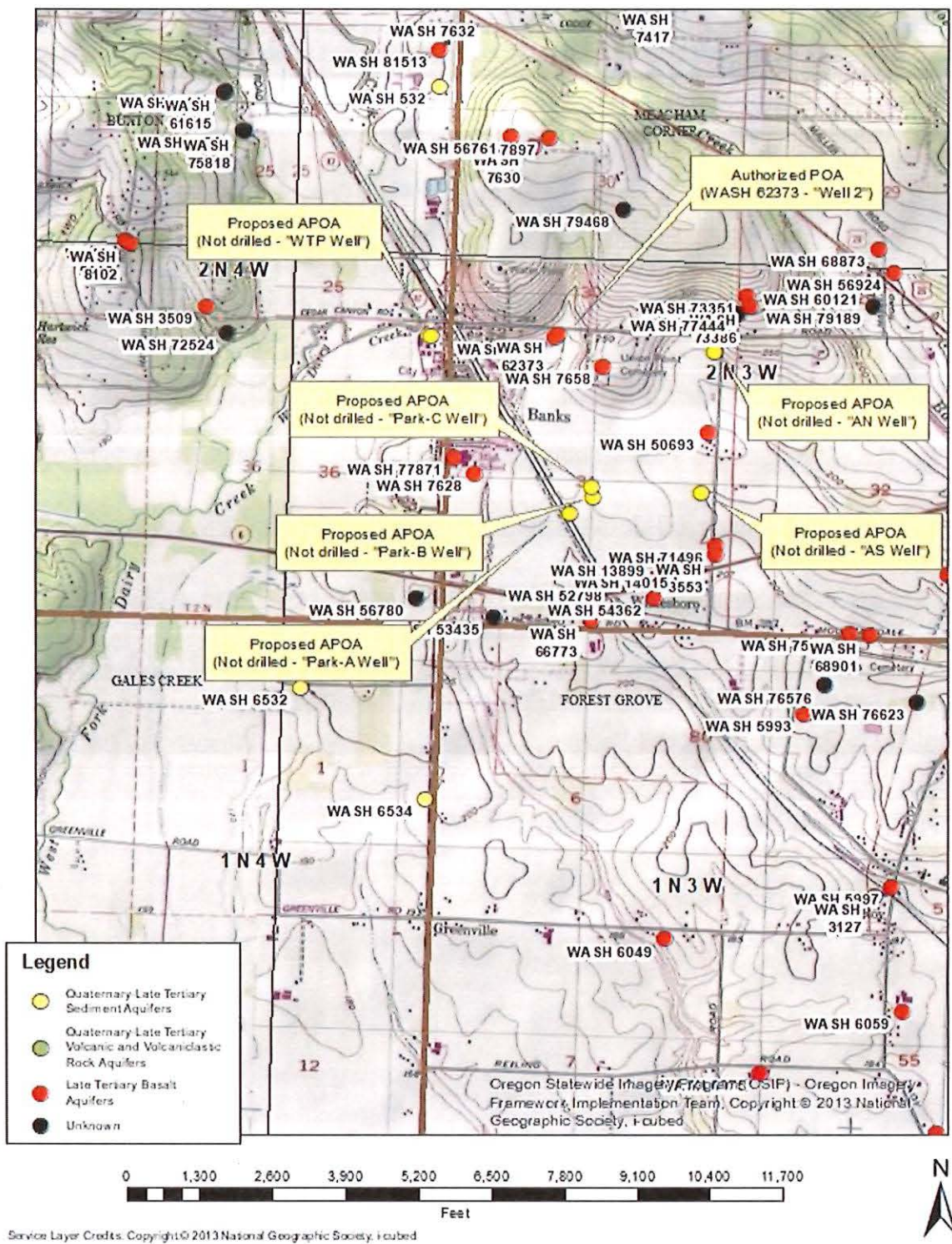
United States Geological Survey, 2017, Forest Grove *quadrangle*, Oregon [map], 1:24,000, 7.5 minute topographic series, U.S. Department of the Interior, Reston, VA.

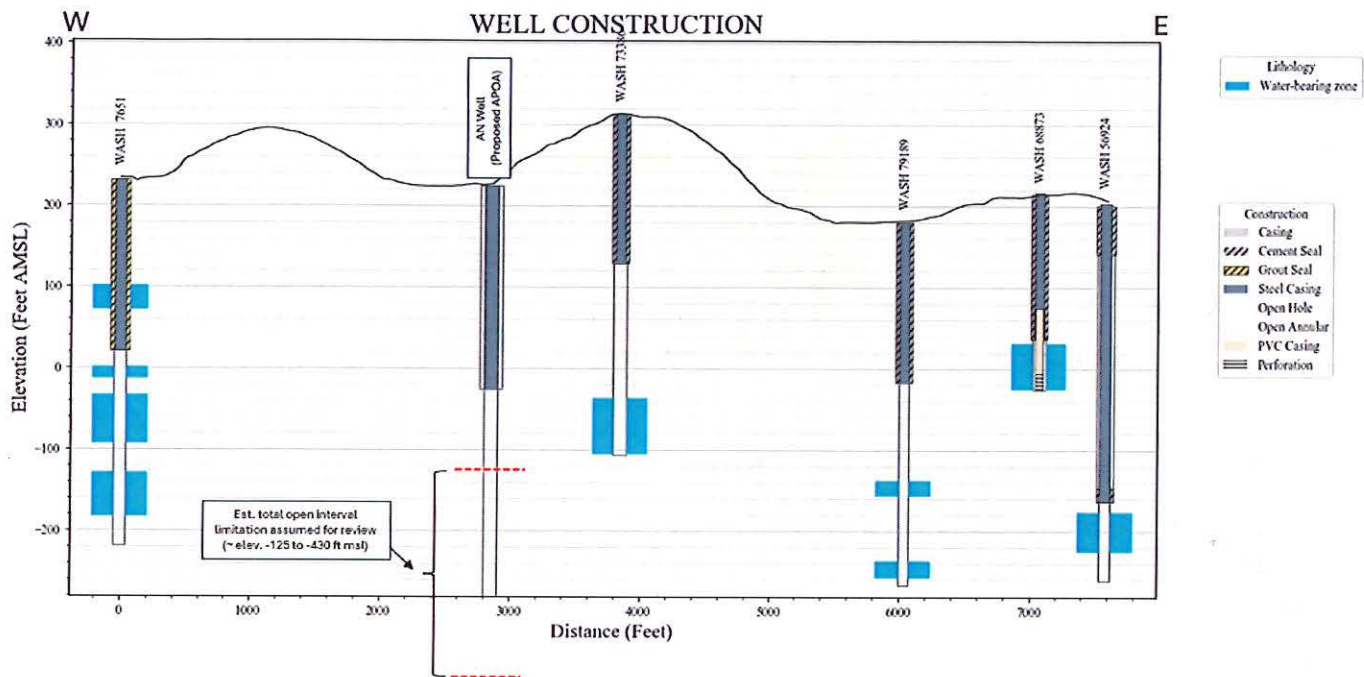
Watershed Sciences, 2009, *LIDAR remote sensing data collection, Department of Geology and Mineral Industries, Willamette Valley Phase I, Oregon*: Portland, OR, December 21.

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, 82 p.

Application T-14450, City of Banks

T2N, R3W



Cross-section : W-E, proposed APOA "AN Well" and WASH 79189Theis Drawdown Analysis, Authorized POA WASH 62373 to WASH 79189**Theis Time-Drawdown Worksheet v.5.00**

Calculates Theis nonequilibrium drawdown and recovery at any arbitrary radial distance, r , from a pumping well for 3 different T values and 2 different S values.

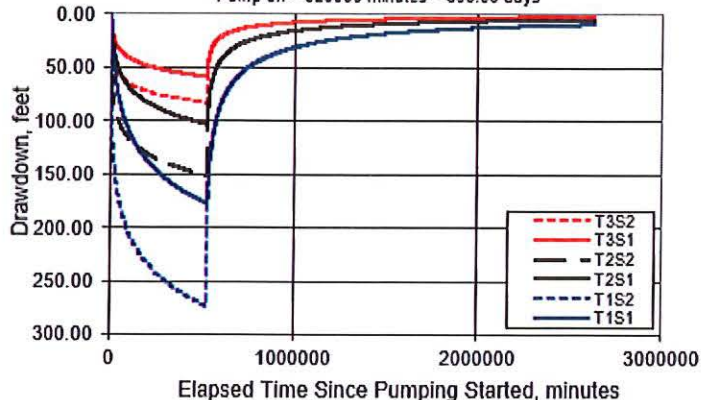
Written by Karl C. Wozniak September 1992. Last modified December 17, 2019

Input Data:	Var Name	Scenario 1	Scenario 2	Scenario 3	Units	
Total pumping time	t		365		d	
Radial distance from pumped well:	r		5700		ft	Q conversions
Pumping rate	Q		1.67		cfs	749.50 gpm
Hydraulic conductivity	K	5	10	20	ft/day	1.67 cfs
Aquifer thickness	b		55		ft	100.20 cfm
Storativity	S_1		0.0001			144,288.00 cfd
	S_2		0.00001			3.31 a/d
Transmissivity Conversions	T_{f2pd}	275	550	1100	ft ² /day	
	T_{ft2pm}	0.190972	0.381944	0.763889	ft ² /min	Recalculate
	T_{gpdft}	2057	4114	8228	gpd/ft	

Use the Recalculate button if recalculation is set to manual

Theis Drawdown and Recovery at $r = 5700$ ft From Pumping Well

Pump on = 525600 minutes = 365.00 days



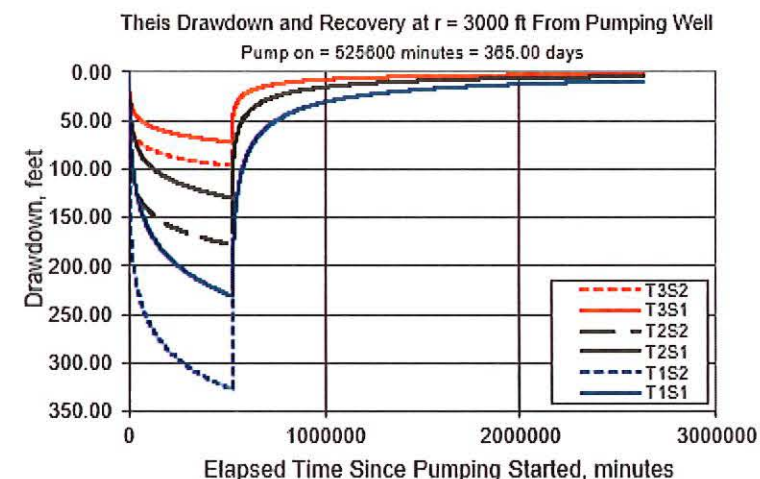
Theis Drawdown Analysis, Proposed APOA "AN Well" to WASH 79189**Theis Time-Drawdown Worksheet v.5.00**

Calculates Theis nonequilibrium drawdown and recovery at any arbitrary radial distance, r , from a pumping well for 3 different T radial distance, r , from a pumping well for 3 different T values and 2 different S values.

Written by Karl C. Wozniak September 1992. Last modified December 17, 2019

Input Data:	Var Name	Scenario 1	Scenario 2	Scenario 3	Units	
Total pumping time	t		365		d	
Radial distance from pumped well:	r		3000		ft	Q conversions
Pumping rate	Q		1.67		cfs	749.50 gpm
Hydraulic conductivity	K	5	10	20	ft/day	1.67 cfs
Aquifer thickness	b		55		ft	100.20 cfm
Storativity	S_1		0.0001			144,288.00 cfd
	S_2		0.00001			3.31 af/d
Transmissivity Conversions	T_{ft2pd}	275	550	1100	ft ² /day	
	T_{ft2pm}	0.190972	0.381944	0.763889	ft ² /min	
	T_{gpdft}	2057	4114	8228	gpd/ft	

Use the Recalculate button if recalculation is set to manual



**BEFORE THE WATER RESOURCES DEPARTMENT
OF THE
STATE OF OREGON**

In the Matter of Transfer Application	)	PRELIMINARY DETERMINATION
T-14450, Washington County	)	PROPOSING APPROVAL OF ADDITIONAL
	)	POINTS OF APPROPRIATION

Authority

Oregon Revised Statutes (ORS) 537.705 and 540.505 to 540.580 establish the process in which a water right holder may submit a request to transfer the point of appropriation, place of use, or character of use authorized under an existing water right. Oregon Administrative Rules (OAR) Chapter 690, Division 380 implement the statutes and provides the Department's procedures and criteria for evaluating transfer applications.

Applicant

CITY OF BANKS
ATTN: JOLYNN BECKER
13680 NW MAIN ST
BANKS, OR 97106

Findings of Fact

1. On April 29, 2024, City of Banks ATTN: Jolynn Becker filed an application for additional points of appropriation under Certificate 95849. The Department assigned the application number T-14450.
2. Notice of the application for transfer was published on May 7, 2024, pursuant to OAR 690-380-4000. No comments were filed in response to the notice.
3. On February 7, 2025, the Department determined that the proposed additional points of appropriation (APOAs) would not develop the same aquifer as the authorized points of appropriation (POAs):
 - a) Authorized POA, WASH 62373 or Well-2, is 665 feet deep, with an open interval between 300 and 665 ft bls within the local Columbia River Basalt Group (CRBG) aquifer system. According to the WASH 62373 well log and additional documents provided by the applicant's agent, there are two principal water-bearing interflow zones in this well: 378-468 ft bls (est. 350 gpm) and 615-660 ft bls (est. 300 gpm).

Pursuant to OAR 690-380-4030, any person may file a protest or standing statement within 30 days after the last date of publication of the newspaper notice or the Department's weekly notice as prescribed by OAR 690-380-4020, whichever is later, of this preliminary determination.

- b) Transfer application T-14450 submitted documentation that provides additional information intended to support “the development of all basalt water bearing zones (WBZs) encountered to a depth of 665 feet below ground surface (bgs) as one aquifer unit.”
- c) OWRD has reviewed this additional documentation and concludes that it does **not** support the applicant’s request to consider “all basalt WBZs encountered to a depth of 665 feet bgs as one aquifer unit.” Instead, OWRD finds the preponderance of the evidence supports a finding that the two WBZs in WASH 62373 are discretely different aquifer sources:
 - i) The spinner log instrumentation in WASH 62373 has a low-flow measurement threshold of <1.0 ft/minute. This threshold would equate to a potential vertical flow in the borehole of approximately 6 gallons per minute (gpm). This flow rate could exist within the borehole without being detectable by the spinner log instrumentation used for the survey of WASH 62373. The presence of any vertical flow in a borehole under otherwise static conditions indicates a head differential between successive WBZ, which, indicates that each WBZ behaves as a separate “aquifer.”

Because vertical flow might exist in WASH 62373 that is below the threshold detection limit of the spinner log device, the interpreted results of this survey do not prove conclusively that the two primary WBZ in this well (378-468 ft bls and 615-660 ft bls) behave as “one aquifer unit.”

- ii) The application attachment shows that well logs for WASH 62373, nearby WASH 50693, and other nearby basalt wells did not indicate changes in static water levels as the wells were being drilled through multiple water bearing zones. If present, such head changes would indicate a vertical gradient and resultant vertical flow between WBZs, which in turn would imply that each WBZ was a discretely different aquifer. Conversely, no head changes between WBZ would suggest a single aquifer unit.

However, while head changes observed during drilling can be an indication of different aquifers/discrete WBZs, particularly if the change is relatively large, the absence of such observed changes is not conclusive proof of a single “aquifer unit” comprised of multiple WBZs, for the following reasons:

- (1) in cases where head differences between WBZs are relatively small (e.g., 1-2 feet), the differences may not be discernible during disruptive drilling activities;
- (2) when drilling through multiple WBZs, the head in the well becomes a composite of various heads under dynamic conditions (with interflow occurring through the borehole); thus it can be impossible to quantify, or even discern, any head changes attributable to a single WBZ;
- (3) pumping of other nearby CRBG wells could affect water levels measured in the well borehole.

- iii) After recently completing an elevation survey of the wellheads of both WASH 7651 and WASH 62373, the application states that static water level elevations between the wells “differed by 0.62 – 1.12 feet.” This range is comprised of three rounds of contemporaneous measurements made in 2023. A similar range of head differences between WASH 7651 and WASH 62373 was measured more recently in February and March of 2024, at 0.7 ft and 1.0 ft, respectively.
 - iv) As reported to OWRD, these measurements were made when the WASH 62373 pump had been idle for at least 24 hours for the February reading, and at least 7 days for the March measurement. The range of reported static water level differences between WASH 7651 and WASH 62373 indicates the presence of a vertical gradient between the two major WBZ intersected by the wells. This vertical gradient in turn indicates that the two WBZ in WASH 62373 behave as discrete aquifers as defined by different head conditions.
 - d) Despite the authorization of WASH 62373 as a POA for certificate 95849 in its current configuration, obtaining groundwater from two discrete aquifers within the CRBG aquifer system, any APOA wells installed under this transfer application will be limited to only one of the two primary aquifers/WBZ present in WASH 62373.
4. On February 7, the Department determined that the comingling of aquifers can be avoided by implementing the changes to planned construction of the proposed APOA wells which will limit the wells to only a single WBZ.
 5. On March 28, 2025, the applicant provided a memorandum responding to OWRD’s February 27 Groundwater Review. The memorandum provided further evidence that the two WBZ’s identified constitute a single aquifer system.
 6. On June 13, 2025, the Department responded to the applicant, and the data analysis provided, and determined that the two water bearing zones developed by the applicant’s current authorized well constitute a single aquifer with two primary basalt WBZ’s between -125 and -430 msl.
 7. On July 24, 2025, the Department sent a copy of the draft Preliminary Determination to the applicant, proposing to approve Transfer Application T-14450. The draft Preliminary Determination cover letter provided a deadline of August 23, 2025, for the applicant to respond and submit the required information. The applicant requested that the Department proceed with issuance of a Preliminary Determination and provided the necessary information to demonstrate that the applicant is authorized to pursue the transfer.
 8. On August 8, 2025, the applicant’s agent requested an extended completion date of October 1, 2045, and provided a detailed plan of the city’s timeline to complete the changes, citing aquifer storage recovery testing, available funding, and completing intensive infrastructure work.

9. The right to be transferred is as follows:

Certificate: 95849 in the name of CITY OF BANKS (perfected under Permit G-16312)
Use: MUNICIPAL USE
Priority Date: DECEMBER 5, 2002
Rate: 1.0 CUBIC FOOT PER SECOND
Period of Use: YEAR ROUND
Source: WELL 2 (WASH 62373) in WEST FORK DAIRY CREEK BASIN

Authorized Point of Appropriation:

Twp	Rng	Mer	Sec	Q-Q	Measured Distances
2 N	3 W	WM	31	NE NW	WELL 2 (WASH 62373) - 120 FEET SOUTH AND 2070 FEET EAST FROM THE NW CORNER OF SECTION 31

Authorized Place of Use:

MUNICIPAL USE
WITHIN THE SERVICE BOUNDARY OF THE CITY OF BANKS

10. Transfer Application T-14450 proposes additional points of appropriation located:

Twp	Rng	Mer	Sec	Q-Q	Measured Distances	Approximate distance from the Authorized Point of Appropriation
2 N	3 W	WM	31	NE NE	AN - 275 FEET SOUTH AND 475 FEET WEST FROM NE CORNER, SECTION 31	2800 FEET EAST
2 N	3 W	WM	31	NE SE	AS - 2500 FEET NORTH AND 565 FEET WEST FROM THE SE CORNER OF SECTION 31	3745 FEET SOUTHEAST
2 N	3 W	WM	31	NE SW	PARK-A - 2120 FEET NORTH AND 2970 FEET WEST FROM THE SE CORNER OF SECTION 31	3160 FEET SOUTH
2 N	3 W	WM	31	NW SE	PARK-B - 2460 FEET NORTH AND 2520 FEET WEST FROM THE SE CORNER OF SECTION 31	2920 SOUTHEAST
2 N	3 W	WM	31	NW SE	PARK-C - 2630 FEET NORTH AND 2540 FEET WEST FROM THE SE CORNER OF SECTION 31	22750 FEET SOUTHEAST
2 N	4 W	WM	36	NE NE	WTP - 175 FEET SOUTH AND 335 FEET WEST FROM THE NW CORNER OF SECTION 31	2220 FEET WEST

Transfer Review Criteria [OAR 690-380-0100(14), OAR 690-380-4010(2), OAR and OAR 690-380-2110(2)]

11. Water has been used within the last five years according to the terms and conditions of the right. There is no information in the record that would demonstrate that the right is subject to forfeiture under ORS 540.610.

12. A water delivery system sufficient to use the full amount of water allowed under the existing right was present within the five-year period prior to submittal of Transfer Application T-14450.
13. The water right is subject to transfer as defined in ORS 540.505(4) and OAR 690-380-0100(14).
14. The proposed points of appropriation develop groundwater from the same aquifer as the authorized point of appropriation, as required by OAR 690-380-2110(2).
15. The proposed change, as conditioned, would not result in enlargement of the right.
16. The proposed change, as conditioned, would not result in injury to other existing water rights.
17. All other application requirements are met.

Determination and Proposed Action

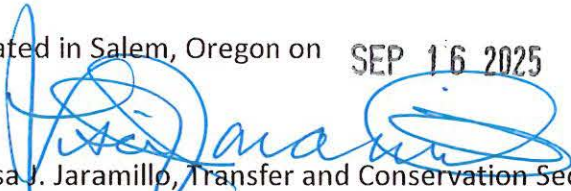
The additional points of appropriation proposed in Transfer Application T-14450 appear to be consistent with the requirements of ORS 537.705 and 540.505 to 540.580 and OAR 690-380-5000. If protests are not filed pursuant to OAR 690-380-4030, the application will be approved.

If Transfer Application T-14450 is approved, the final order will include the following:

1. *The additional points of appropriation proposed in Transfer Application T-14450 are approved.*
2. *The right to the use of the water is restricted to beneficial use at the place of use described and is subject to all other conditions and limitations contained in Certificate 95849 and any related decree.*
3. *Approval of this transfer application does not constitute nor grant legal access onto or through another person's property for purposes of accessing the new points of appropriation.*
4. *Water right Certificate 95849 is cancelled.*
5. *The quantity of water diverted at the new additional points of appropriation (AN, AS, PARK-A, PARK-B, PARK-C, and WTP), together with that diverted at the original point of appropriation (WELL 2 (WASH 62373)), shall not exceed the quantity of water lawfully available at the original point of appropriation (WELL 2 (WASH 62373)).*
6. *Water shall be acquired from the same aquifer (water source) as the original point of appropriation. This aquifer is located -125 to -430 msl within the CRBG.*
7. *Water use measurement conditions:*

- a. *Before water use may begin under this order, the water user shall install a totalizing flow meter, or, with prior approval of the Director, another suitable measuring device, at each point of appropriation (new and existing).*
 - b. *The water user shall maintain the meters or measuring devices in good working order.*
 - c. *The water user shall allow the Watermaster access to the meters or measuring devices; provided however, where the meters or measuring devices are located within a private structure, the Watermaster shall request access upon reasonable notice.*
8. *Full beneficial use of the water shall be made, consistent with the terms of this order, on or before **October 1, 2031**. A Claim of Beneficial Use prepared by a Certified Water Right Examiner shall be submitted by the applicant to the Department within one year after the deadline for completion of the changes and full beneficial use of the water.*
 9. *After satisfactory proof of beneficial use is received, a new certificate confirming the right transferred will be issued.*

Dated in Salem, Oregon on **SEP 16 2025**


Lisa J. Jaramillo, Transfer and Conservation Section Manager, for
IVAN GALL, DIRECTOR
Oregon Water Resources Department

This Preliminary Determination was prepared by Dante Luongo. If you have questions about the information in this document, you may reach me at 971-304-5006 or dante.j.luongo@water.oregon.gov.

Protests

Under the provisions of ORS 540.520(6) & (7) and OAR 690-380-4030, within 30 days after the last date of publication of the newspaper notice or the Department's weekly notice as prescribed by OAR 690-380-4020, whichever is later, any person may file, jointly or severally, a protest expressing opposition of approval of the transfer application and disagreement with this Preliminary Determination or a standing statement in support of this Preliminary Determination. If this Preliminary Determination determines that a change in point of diversion or appropriation would result in injury, the applicant may file a notification of intent to pursue approval of the transfer under OAR 690-380-5030 to 690-380-5050. Protests and standing statements must be received by the Water Resources Department within 30 days after the last date of publication of the newspaper notice or the Department's weekly notice as prescribed by OAR 690-380-4020, whichever is later.

Protests must be in writing and received in hard copy form with the appropriate statutory protest filing fee; protests cannot be filed by electronic mail. [OAR 690-002-0025(3) and 690-380-0100(9)]. The protest must include the following:

- The person's name, address, and telephone number;
- All reasonably ascertainable issues and all reasonably available arguments supporting the person's position by the close of the protest period. Failure to raise a reasonably ascertainable issue in a protest or failure to provide sufficient specificity to afford the Department an opportunity to respond to the issue may preclude consideration of the issue during the hearing;
- If you are the applicant, a protest fee of \$720 required by ORS 536.050; and
- If you are not the applicant, a protest fee of \$1425 required by ORS 536.050 and proof of service of the protest upon the applicant.

Requests for Standing

Under the provisions of OAR 690-380-4030(5), the Department shall provide to persons who have filed standing statements as defined under OAR 690-380-0100(11) notice of any differences between the Department's Preliminary Determination and the Final Order, notice of a hearing on the application under OAR 137-003-0535, and an opportunity to request limited party status or party status in the hearing.

Requests for standing must be received in the Water Resources Department no later than 30 days after the last date of publication of the newspaper notice or the Department's weekly notice as prescribed by OAR 690-380-4020, whichever is later. Requests for standing must be in writing, and must include the following:

- The requester's name, mailing address and telephone number;
- If the requester is representing a group, association or other organization, the name, address and telephone number of the represented group;
- A statement that the requester supports the preliminary determination as issued.

After the protest period has ended, the Director will either issue a Final Order or schedule a contested case hearing. The contested case hearing will be scheduled only if a protest has been filed under OAR 690-380-4030. In accordance with OAR 690-380-4200, notice and conduct of the hearing shall:

- Be under the applicable provisions of ORS 183.310 to 183.550, pertaining to contested cases, and the hearing shall be held in the area where the rights are located unless all parties stipulate otherwise; and

- If a protest has asserted that a water right to be transferred has been forfeited through non-use, include the notice and procedures described in OAR 690-017-0500 to 690-017-0900.

If after hearing the Department issues a proposed Final Order finding that a change in point of diversion or appropriation will result in injury, the applicant may file a notification of intent to pursue approval of the transfer under OAR 690-380-5030 to 690-380-5050 within 15 days of receipt of the proposed order. Notwithstanding 690-002-0175, if the applicant files a notification of intent to pursue approval of the transfer under 690-380-5030 to 690-380-5050, the deadline for filing exceptions to the proposed order shall be 30 days after the Department provides notice to the parties that the transfer does not meet the requirements of 690-380-5030 to 690-380-5050.

If you do not request a hearing within 30 days after the close of the protest period, or if you withdraw a request for a hearing, notify the Department or the administrative law judge that you will not appear, or fail to appear at a scheduled hearing, the Director may issue a final order by default. If the Director issues a Final Order by default, the Department designates the relevant portions of its files on this matter, including all materials that you have submitted relating to this matter, as the record for purpose of proving a *prima facie* case upon default.

You may be represented by an attorney at the hearing. Legal aid organizations may be able to assist a party with limited financial resources. Generally, partnerships, corporations, associations, governmental subdivisions, or public or private organizations are represented by an attorney. However, consistent with OAR 690-002-0020 and OAR 690-137-0555, an agency representative may represent partnerships, corporations, associations, governmental subdivisions or public, or private organizations if the Department determines that appearance of a person by an authorized representative will not hinder the orderly and timely development of the record in this case.

Notice Regarding Servicemembers: Active-duty servicemembers have a right to stay proceedings under the federal Servicemembers Civil Relief Act. 50 U.S.C. App. §§501-597b. For more information contact the Oregon State Bar at 800-452-8260, the Oregon Military Department at 971-355-4127, or the nearest United States Armed Forces Legal Assistance Office through <http://legalassistance.law.af.mil>.

If you have questions about how to file a protest or if you have previously filed a protest and you want to know the status, please contact Will Davidson at 503-507-2749.

If you have questions about the Department or any of its programs, please contact our Water Resources Customer Service Group at 503-986-0900.

Address any correspondence to: Oregon Water Resources Department, Transfer and Conservation Section, 725 Summer Street NE, Suite A, Salem OR 97301-1266.



Oregon

Tina Kotek, Governor

Water Resources Department

North Mall Office Building

725 Summer St NE, Suite A

Salem, OR 97301

Phone 503 986-0900

Fax 503 986-0904

www.oregon.gov/owrd

September 16, 2025

VIA CERTIFIED MAIL AND E-MAIL

CITY OF BANKS
ATTN: JOLYNN BECKER
13680 NW MAIN ST
BANKS, OR 97106

SUBJECT: Water Right Transfer Application T-14550

Please find enclosed the Preliminary Determination indicating that, based on the information available, the Department intends to approve application T-14550. This document is an intermediate step in the approval process; water may not be used legally as proposed in the transfer application until a Final Order has been issued by the Department. Please read this entire letter carefully to determine your responsibility for additional action.

A public notice is being published in the Department's weekly publication and in the Hillsboro News-Times newspaper, simultaneously with issuance of the Preliminary Determination. The notice initiates a period in which any person may file either a protest opposing the decision proposed by the Department in the Preliminary Determination or a standing statement supporting the Department's decision. The protest period will end 30 days after the last date of newspaper publication.

If no protest is filed, the Department will issue a Final Order consistent with the Preliminary Determination. You should receive a copy of the Final Order about 30 days after the close of the protest period.

If a protest is filed, the application may be referred to a contested case proceeding. A contested case provides an opportunity for the proponents and opponents of the decision proposed in the Preliminary Determination to present information and arguments supporting their position in a quasi-judicial proceeding.

Please don't hesitate to contact me at 971 304-5006 or Dante.J.Luongo@water.oregon.gov, if I may be of assistance.

Sincerely,

Dante Luongo
Transfer Specialist
Transfer and Conservation Section

cc: Transfer Application file T-14550
Jacob W. Constans, District 18 Watermaster (*via e-mail*)
Bob Long, Agent for the applicant (*via e-mail*)

Groundwater Transfer Review Summary Form

Transfer/PA # T- 14450

GW Reviewer Dennis Orlowski Date Review Completed: February 7, 2025

Summary of Same Source Review:

☒ The proposed change in point of appropriation is not within the same aquifer as per OAR 690-380-2110(2).

NOTE: currently-proposed construction details for six to-be-drilled APOA wells would lead to all of those proposed wells obtaining groundwater from two discrete basalt water-bearing zones ("aquifers") in the local CRBG aquifer system. Despite the fact that the POA for this application (WASH 62373) is authorized by certificate 95849 in its current configuration in which it obtains groundwater from two discrete WBZ, current well construction regulations limit wells to obtaining groundwater only from a single aquifer, or water-bearing zone (OAR 690-200). This issue is discussed in detail throughout this review.

Summary of Water Level Decline Condition Review:

☐ Water levels at the original point(s) of appropriation have exceeded the allowed decline threshold defined by conditions in the originating water right.

Summary of Injury Review:

☐ The proposed transfer will result in another, existing water right not receiving previously available water to which it is legally entitled or result in significant interference with a surface water source as per 690-380-0100(3).

Summary of GW-SW Transfer Similarity Review:

☐ The proposed SW-GW transfer doesn't meet the definition of "similarly" as per OAR 690-380-2130.

This is only a summary. Documentation is attached and should be read thoroughly to understand the basis for determinations.



Oregon Water Resources Department
725 Summer Street NE, Suite A
Salem, Oregon 97301-1271
(503) 986-0900
www.wrd.state.or.us

Ground Water Review Form:

- ☒ Water Right Transfer
☐ Permit Amendment
☐ GR Modification
☐ Other

Application: T-14450

Applicant Name: City of Banks

Proposed Changes: ☐ POA ☒ APOA ☐ SW→GW ☒ RA
☐ USE ☐ POU ☐ OTHER

Reviewer(s): Dennis Orlowski

Date of Review: February 7, 2025

Date Reviewed by GW Mgr. and Returned to WRSD: JTI 2/7/25

The information provided in the application is insufficient to evaluate whether the proposed transfer may be approved because:

- ☐ The water well reports provided with the application do not correspond to the water rights affected by the transfer.
- ☐ The application does not include water well reports or a description of the well construction details sufficient to establish the ground water body developed or proposed to be developed.
- ☐ Other _____

1. Basic description of the changes proposed in this transfer: This proposed transfer relates to certificate 95849, which authorizes groundwater pumped from a single authorized POA (WASH 62373, "Well-2") for municipal uses by the City of Banks (maximum instantaneous pumping rate of 1.0 cfs, ~449 gpm).

This transfer proposes to add the following APOA to certificate 95849 (note that all of the proposed APOA are proposed to-be-drilled (TBD) well locations):

- WTP (Water Treatment Plant) well – TBD
- AN (Aerts Rd North) well – TBD
- AS (Aerts Rd South) well – TBD
- Park-A (Park Primary) well – TBD
- Park-B (Park Alternative) well – TBD
- Park-C (Park Alternative) well – TBD

NOTE: the authorized POA for certificate 95849, WASH 62373, is also a currently-proposed APOA for permit G-7593, which authorizes groundwater from a single POA (WASH 7651) for municipal uses by the City of Banks (WASH 7651, "Well-1", is located about 60 feet away from WASH 62373). This proposed change for WASH 62373 is part of transfer application T-14449, which as of this date is under review by OWRD.

2. Will the proposed POA develop the same aquifer (source) as the existing authorized POA?

☒ Yes, AND (see comments) ☐ No Comments: Authorized POA WASH 62373 ("Well-2") is 665 feet deep, with an open interval between 300 and 665 ft bls within the local Columbia River Basalt Group (CRGB) aquifer system. According to the WASH 62373 well log and additional documents provided by the applicant's agent (CwM-H2O, 2018), there are two principal water-bearing interflow zones in this well: 378-468 ft bls (est. 350 gpm) and 615-660 ft bls (est. 300 gpm).

Transfer application T-14450 provided attached documentation ("Interpretation of Basalt Water-Bearing Zones in the Area of Banks, Oregon") that provides additional information intended to support "...the development of all basalt WBZs encountered to a depth of 665 feet below ground surface (bgs) as one aquifer unit" (emphasis added). The information provided consists of (1) recent geophysical evidence (video survey, caliper log, spinner logs, temperature log); (2) evidence from area water well reports of equivalent static water levels; and (3) evidence from recent water level elevations: wells 1 and 2.

OWRD has reviewed this additional documentation and concludes that it does **not** support the applicant's request to consider "all basalt WBZs encountered to a depth of 665 feet bgs as one aquifer unit." **Instead, OWRD finds the preponderance of the evidence supports a finding that the two WBZs in WASH 62373 are discretely different aquifer sources.**

OWRD comments on the supplemental application documents, and our rationale for considering the presence of two discrete aquifers in WASH 62373, are as follows:

- (1) The spinner log instrumentation used for the 2017 geophysical survey conducted in WASH 62373 has a low-flow measurement threshold of <1.0 ft/minute (pers. comm., Pacific Surveys, 1/24/2025). In WASH 62373 this threshold would equate to a potential vertical flow in the borehole of approximately 6 gpm; this flow rate is that which could exist within the borehole without being detectable by the spinner log instrumentation used for the survey of WASH 62373. The presence of *any* vertical flow in a borehole under otherwise static conditions (i.e., non-pumping) indicates a head differential between successive WBZ, which in turn indicates that each WBZ behaves as a separate "aquifer" (source).

Because vertical flow might exist in WASH 62373 that is below the threshold detection limit of the spinner log device, the interpreted results of this survey do **not** prove conclusively that the two primary WBZ in this well (378-468 ft bls and 615-660 ft bls) behave as "one aquifer unit."

- (2) The application attachment asserts that the well logs for WASH 62373, nearby WASH 50693 (Quail Valley Golf Course well), and other nearby basalt wells did not indicate changes in static water levels as the wells were being drilled through multiple water-bearing zones. If present, such head changes would indicate a vertical gradient and resultant vertical flow between WBZs, which in turn would imply that each WBZ was a discretely different aquifer. Conversely, no head changes between WBZ would suggest a single aquifer unit.

However, while head changes observed during drilling can be an indication of different aquifers/discrete WBZs, particularly if the change is relatively large (e.g., at least several feet), the absence of such observed changes is *not* conclusive proof of a single “aquifer unit” comprised of multiple WBZs, for the following reasons: (1) in cases where the actual head differences between WBZ are relatively small (e.g., 1-2 feet), such differences might not be discernible during typically disruptive drilling activities; (2) when drilling through multiple WBZ, the head in the well becomes a composite of various heads under dynamic conditions (with interflow occurring through the borehole); thus it can be impossible to quantify, or even discern, any head changes attributable to a single WBZ; (3) pumping of other nearby CRBG wells could affect water levels measured in the well being drilled (both WASH 62373 and WASH 50693 were drilled primarily in April and May of 2005 and 1996, respectively, which is within the irrigation pumping period for this basin).

- (3) After recently completing an elevation survey of the wellheads of both WASH 7651 (“Well-1”) and WASH 62373 (“Well-2”), the application states that static water level elevations between the wells “differed by 0.62 – 1.12 feet.” This range is comprised of three rounds of contemporaneous measurements made in both wells on March 15th, April 7th, and October 13th, 2023 (T-14449 application attachment).

A similar range of head differences between WASH 7651 and WASH 62373 was measured more recently in February and March of 2024, at 0.7 ft and 1.0 ft, respectively. As reported to OWRD, these measurements were made when the WASH 62373 pump had been idle for at least 24 hours for the February reading, and at least 7 days for the March measurement (for the March 2024 measurement in WASH 7651 it was reported that the pump had been pulled for replacement, and had not been pumped for at least one year) (T-14449 application attachment).

The range of reported static water level differences between WASH 7651 and WASH 62373, though relatively small, indicates the presence of a vertical gradient between the two major WBZ intersected by the wells. This vertical gradient in turn indicates that the two WBZ in WASH 62373 behave as discrete aquifers as defined by different head conditions.

Despite the authorization of WASH 62373 as a POA for certificate 95849 in its current configuration (i.e., obtaining groundwater from two discrete aquifers within the CRBG aquifer system), any APOA wells installed under this transfer application will be limited to only one of the two primary aquifers/WBZ present in WASH 62373. Using information derived primarily from WASH 62373 and WASH 50693 (QVGC well), the two primary WBZ in the vicinity of the authorized and proposed APOAs are estimated to be present at the following approximate elevations:

- **Upper WBZ: ~ -125 to -250 ft msl**
- **Lower WBZ: ~ -320 to -430 ft msl.**

For the six proposed APOA not yet drilled, compliance with the single WBZ provision will require corresponding reductions in planned total well depths, as well as revisions to the planned cased and sealed intervals.

3. a) Is the existing authorized POA subject to a water level decline condition?

☒ Yes ☐ No Comments: Certificate 95849 has several decline conditions common to CRBG aquifer wells in the Willamette Basin.

b) If yes, for each POA identify the reference level, most recent spring-high water level, and whether an applicable permit decline condition has been exceeded: A reference level for WASH 62373, or a method for prescribing one, is not stipulated in certificate 95849. However, superseded permit G-16312 states that "use of water from a new well shall not begin until an initial static water level in the well has been measured and reported to the Department."

The first plausible measurement reported to OWRD for WASH 62373 was from 5/25/2005 (48.0 ft bls (~elevation 184 ft msl)), which preceded the 4/28/2008 permit date by several years. However, the March 2009 aquifer test of WASH 62373 shows a similar static level of about 50 ft bls. Consequently, from this information a reference static water level for WASH 62373 is established at 48.0 ft bls (note that recent static levels reported to OWRD from March of 2023 and 2024 have been higher at ~35-40 ft bls; these higher levels reflect long-term recovery trends observed in the CRBG aquifer system throughout much of the Tualatin Valley).

- WASH 62373 reference level: 48.0 ft bls.
- Most recent spring high water level: 39.13 ft bls (3/1/2024).
- No exceedances of permit decline conditions.

4. a) Is there more than one source developed under the right (e.g., basalt and alluvium)?

☒ Yes ☐ No Comments: See discussion in section 2 of this review

b) If yes, estimate the portion of the right supplied by each of the sources and describe any limitations that will need to be placed on the proposed change (rate, duty, etc.): The potential for commingling sources (i.e., multiple discrete WBZ/aquifers within the local CRBG aquifer system) can be avoided by implementing the changes to planned construction of the proposed APOA wells which will limit the wells to only a single WBZ, as discussed in Section 2 of this review.

5. a) Will this proposed change, at its maximum allowed rate of use, likely result in an increase in interference with another ground water right?

☒ Yes ☐ No Comments: Relative to the location of authorized POA WASH 62373, several of the proposed APOA locations are nearer to existing groundwater rights. Thus, this proposed change will likely result in an increase in interference with those rights.

b) If yes, would this proposed change, at its maximum allowed rate of use, likely result in another groundwater right not receiving the water to which it is legally entitled?

☐ Yes ☒ No If yes, explain: Each of proposed APOA locations was evaluated for potential injury to applicable existing groundwater rights. For relevant evaluations, the Theis distance-drawdown analysis was performed to estimate the degree of additional interference at the nearest applicable existing well (Theis, 1935). The ranges of aquifer parameter values used were derived primarily from results of a 2009 aquifer test completed in proposed APOA WASH 62373 (Golder Associates, 2009) and in another separate test of WASH 50693 (QVGC well), as well as published values (Conlon et al., 2005; Gannett and Caldwell, 1998).

Because it is not currently known which of the two primary WBZ will be developed in the APOA wells proposed by this application, a potential "worst case" scenario was evaluated for injury potential. This scenario consists of pumping from the proposed "AN Well" location from the upper WBZ only; the "AN Well" location is relatively near to existing wells that obtain groundwater primarily from that same WBZ: WASH 79189 and WASH 56924 (see attached cross-section). Furthermore, because the same "AN Well" location (as well as WASH 62373) was also proposed as an APOA in transfer application T-14449, that well could be authorized to pump a stacked rate of 1.67 cfs (equal to 0.67 cfs from T-14449/permit G-7593, plus 1.0 cfs from this application T-14450/certificate 95849).

(Note that there are several known wells relatively close to the proposed location for the "WTP Well"; however, current OWRD records indicate that these particular wells are owned by the City of Banks, and are associated with irrigation of school grounds (WASH 77871, WASH 7628, WASH 7621, WASH 3184). Consequently, it is assumed that the City can manage potential adverse interference to these existing wells resulting from pumping at the "WTP Well" location).

Relative to the location of authorized POA WASH 62373, the proposed location for the "AN Well" is about 2700 feet nearer to WASH 79189. The results of the Theis interference analysis indicates that additional interference in WASH 79189 could potentially range from about 10 to 50 feet due to pumping the *stacked* maximum rate (1.67 cfs) 24/7/365 from the "AN Well" (see attached Theis analysis results). Limited water level data from other nearby wells (WASH 56924) indicates that the static water level in WASH 79189 likely ranges from about elevation 180 to 200 ft msl, which would provide roughly 200 feet or more of available drawdown in both it and existing wells of similar completion (i.e., those wells that fully penetrate the upper WBZ present from ~ elevation -125 to -250 ft msl). This approximate range of available drawdown should be sufficient to support ongoing usage of these wells with the change proposed by this application (i.e., the change will not prevent those wells from receiving the groundwater to which they are legally entitled).

The results of the potential injury evaluation suggests that relatively moderate (~10-50 feet) levels of additional drawdown might be imposed in some area wells due to pumping of the "AN Well", and possibly at other proposed APOA locations. It should be noted, however, that these estimates were completed using very conservative operational parameters for the Theis analytical drawdown method: pumping a single well at the full allocated rate (and in this case a stacked rate) for 24 hours a day, 7 days a week, 365 days a year. Actual pump operation will likely not be this sustained, and/or could be rotated to different locations to distribute overall pumping stresses to the CRBG aquifer system.

Furthermore, from the 2009 aquifer test of WASH 62373 ("Well-2") during which that well was pumped continuously for 47 hours at 465 gpm (~1 cfs), a total of 77 feet of drawdown was observed in adjacent WASH 7651 ("Well-1"), and only 2 feet in WASH 50693 (QVGC well) which is located about 3200 feet from WASH 62373. The results from the aquifer test generally confirm the conservative approach used for the Theis drawdown assessments, and that actual additional drawdown might be somewhat less than predicted, particularly for wells that penetrate the deeper of the two primary WBZ.

NOTE: there are relatively very few deeper CRBG wells in the area, i.e., those that obtain groundwater from the deeper WBZ: WASH 62373, WASH 50693 (QVGC well), WASH 71899, and perhaps a few others in the area. Therefore, despite the generally favorable results from the potential injury evaluation done for this review, **the applicant is encouraged to develop only the deeper of the two primary WBZ when completing any of the proposed APOA; limiting access to only the deeper WBZ will reduce the potential for causing adverse interference to the relatively much greater number of existing groundwater users tapping the shallower WBZ.**

6. a) Will this proposed change, at its maximum allowed rate of use, likely result in an increase in interference with **another surface water source**?

☐ Yes ☒ No Comments: With the planned cased and sealed depth of about 200-250 feet for the proposed APOA not yet drilled, and 300 feet for WASH 62373, water-bearing interflow zone(s) will likely be from many tens to perhaps hundreds of feet below any nearby stream reaches. Consequently, it is unlikely that the proposed change would result in an increase in interference with local surface water sources.

- b) If yes, at its maximum allowed rate of use, what is the expected change in degree of interference with any **surface water sources** resulting from the proposed change?

Stream: _____ ☐ Minimal ☐ Significant

Stream: _____ ☐ Minimal ☐ Significant

Provide context for minimal/significant impact: N/A

7. For SW-GW transfers, will the proposed change in point of diversion affect the surface water source similarly (as per OAR 690-380-2130) to the authorized point of diversion specified in the water use subject to transfer?

☐ Yes ☒ No Comments: N/A

8. What conditions or other changes in the application are necessary to address any potential issues identified above: **Despite the authorization of WASH 62373 as a POA for certificate 95849 in its current configuration (i.e., obtaining groundwater from two discrete aquifers within the CRBG aquifer system), any APOA wells installed under this transfer application will be limited to only one of the two primary aquifers/WBZ present in WASH 62373.** Using information derived primarily from WASH 62373 and WASH 50693 (QVGC well), the two primary WBZ in the vicinity of the authorized and proposed APOAs are estimated to be present at the following approximate elevations:

- **Upper WBZ: ~ -125 to -250 ft msl**
- **Lower WBZ: ~ -320 to -430 ft msl.**

For the six proposed APOA not yet drilled, compliance with the single WBZ provision will require corresponding reductions in planned total well depths, as well as revisions to the planned cased and sealed intervals. Despite the generally favorable results from the potential injury evaluation done for this review, **the applicant is encouraged to develop only the deeper of the two primary WBZ when completing any of the proposed APOA; limiting access to only the deeper WBZ will reduce the potential for causing adverse interference to the relatively much greater number of existing groundwater users in the area that tap only the shallower WBZ.**

9. Any additional comments: None

References

Applications: T-14450 RA, T-14449 RA

Conlon, T.D., Wozniak, K.C., Woodcock, D., Herrera, N.B., Fisher, B.J., Morgan, D.S., Lee, K.K., and Hinkle, S.R., 2005, *Ground-water hydrology of the Willamette Basin, Oregon*, Scientific Investigations Report 2005-5168: U. S. Geological Survey, Reston, VA.

CwM-H2O, 2018. Banks-Green Mountain Aquifer Storage and Recovery Feasibility Study, prepared for City of Banks

Freeze, R.A. and Cherry, J.A., 1979, *Groundwater*, Prentice Hall, Englewood Cliffs, New Jersey, 604 p.

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

Golder Associates, 2009. Technical Memorandum: March 2009 Well #2 Aquifer Test Data Analysis.

Personal communication (also provided instrument specifications), Mike Schumacher (Pacific Surveys) to Justin Iverson (OWRD), January 24, 2025.

Theis, C.V., 1935, The relation between the lowering of the piezometric surface and the rate and duration of discharge of a well using groundwater storage, *American Geophysical Union Transactions*, vol. 16, p. 519-524.

United States Geological Survey, 2013, National Elevation Dataset (NED) [DEM geospatial data], 1/9th arc-second, updated 2013.

United States Geological Survey, 2017, Forest Grove *quadrangle*, Oregon [map], 1:24,000, 7.5 minute topographic series, U.S. Department of the Interior, Reston, VA.

Watershed Sciences, 2009, *LIDAR remote sensing data collection, Department of Geology and Mineral Industries, Willamette Valley Phase I, Oregon*: Portland, OR, December 21.

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, 82 p.

[illegible]

WELL CONSTRUCTION

Elevation (Feet AMSL)

Distance (Feet)

WASH 62373

AN Well (Proposed APDA)

WASH 71336

WASH 79189

WASH 56924

WASH 68873

Est. total open interval limitation assumed for review (~elev. -125 to -250 ft msf)

Lithology

- Water-bearing zone

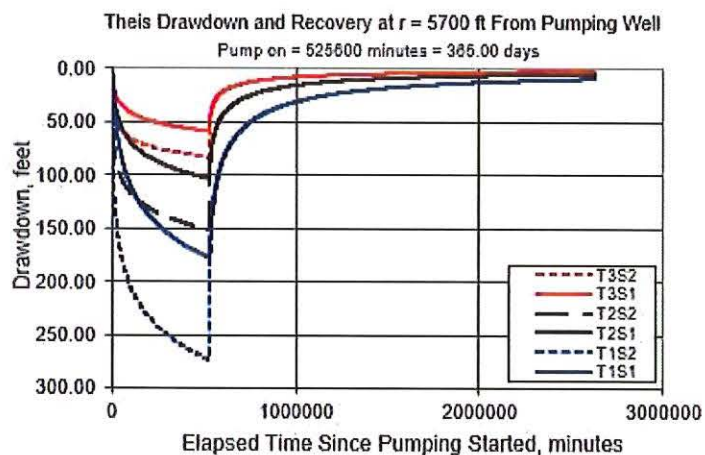
Construction

- Cement Seal
- Casing
- Steel Casing
- Open Hole
- PVC Casing
- Perforation

Theis Time-Drawdown Worksheet v.5.00
 Calculates Theis nonequilibrium drawdown and recovery at any arbitrary radial distance, r , from a pumping well for 3 different T values and 2 different S values.
 radial distance, r , from a pumping well for 3 different T values and 2 different S values.
 Written by Karl C. Wozniak September 1992. Last modified December 17, 2019

Input Data:	Var Name	Scenario 1	Scenario 2	Scenario 3	Units	
Total pumping time	t		365		d	
Radial distance from pumped well:	r		5700		ft	Q conversions
Pumping rate	Q		1.67		cfs	749.50 gpm
Hydraulic conductivity	K	5	10	20	ft/day	1.67 cfs
Aquifer thickness	b		55		ft	100.20 cfm
Storativity	S_1		0.0001			144,288.00 cfd
	S_2		0.00001			3.31 a/d
Transmissivity Conversions	T_ft2pd	275	550	1100	ft2/day	
	T_ft2pm	0.190972	0.381944	0.763889	ft2/min	Recalculate
	T_gpdDFT	2057	4114	8228	gpd/ft	

Use the Recalculate button if recalculation is set to manual



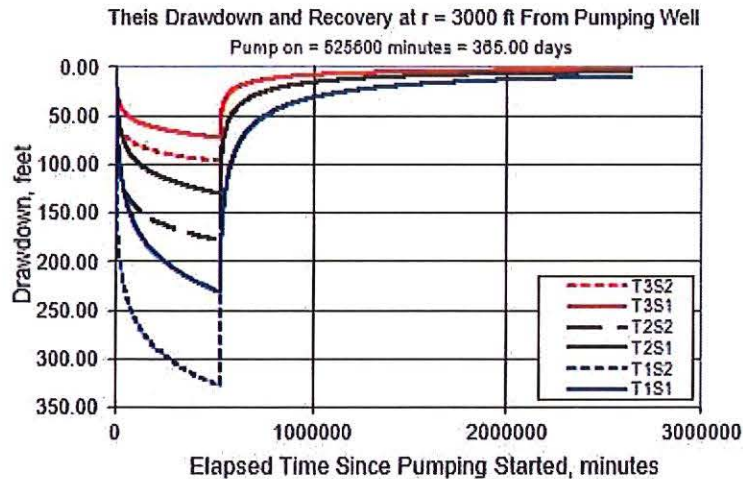
Theis Drawdown Analysis, Proposed APOA "AN Well" to WASH 79189**Theis Time-Drawdown Worksheet v.5.00**

Calculates Theis nonequilibrium drawdown and recovery at any arbitrary radial distance, r , from a pumping well for 3 different T radial distance, r , from a pumping well for 3 different T values and 2 different S values.

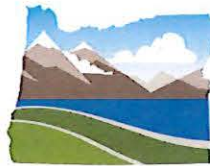
Written by Karl C. Wozniak September 1992. Last modified December 17, 2019

Input Data:	Var Name	Scenario 1	Scenario 2	Scenario 3	Units	
Total pumping time	t		365		d	
Radial distance from pumped well:	r		3000		ft	Q conversions
Pumping rate	Q		1.67		cfs	749.50 gpm
Hydraulic conductivity	K	5	10	20	ft/day	1.67 cfs
Aquifer thickness	b		55		ft	100.20 cfm
Storativity	S_1		0.0001			144,288.00 cfd
	S_2		0.00001			3.31 a/d
Transmissivity Conversions	T_{ft2pd}	275	550	1100	ft ² /day	
	T_{ft2pm}	0.190972	0.381944	0.763889	ft ² /min	
	T_{gpdft}	2057	4114	8228	gpd/ft	

Use the Recalculate button if recalculation is set to manual



Watermaster Review Form: Water Right Transfer



Oregon Water Resources Department
725 Summer St NE, Suite A
Salem, Oregon 97301-1266
(503) 986-0900
www.oregon.gov/OWRD

Transfer Application: T-14450

Review Due Date:

Applicant Name: City of Banks

Proposed Changes: ☐ POU ☐ POD ☒ POA ☐ USE ☐ OTHER

Reviewer(s): Jake Constans

Date of Review: 06/04/2024

1. Do you have evidence that the right has not been used in the last 5 years and that the presumption of forfeiture would not likely be rebuttable? ☐ Yes ☒ No If "Yes", attach evidence (e.g. dated aerial photo showing pavement or building on the land for >5 yrs.)
2. Is there a history of regulation on the source that serves this (or these) right(s) that has involved the transferred right(s) and downstream water rights? ☒ Yes ☐ No Generally characterize the frequency of any regulation or explain why regulation has not occurred:
Surface water in the Tualatin Basin is regulated each year for senior water rights.
3. Have headgate notices been issued for the source that serves the transferred right(s)?
☐ Yes ☒ No ☐ Records not available.
4. In your estimation, after the proposed change, would distribution of water for the right(s) result in regulation of other water rights that would not have occurred if use under the original right(s) was/were maximized? ☐ Yes ☒ No If "Yes", explain:
5. In your estimation, if the proposed change is approved, are there upstream water rights that would be affected? ☐ Yes ☒ No If "Yes", describe how the rights would be affected and list the rights most affected:

6. Check here ☐ if it appears that downstream water rights benefit from return flows resulting from the current use of the transferred right(s)? If you check the box, generally characterize the locations where the return flows likely occur and list the water rights that benefit most:

☒ N/A

7. For POD changes and instream transfers, check here if there are channel losses between the old and new PODs or within the proposed instream reach? If you check the box, describe and, if possible, estimate the losses:

☒ N/A

8. For instream transfers that propose protection of a reach beyond the mouth of the source stream:

☒ N/A Would the quantity be measureable into the receiving stream consistent with OAR 690-077-0015(8)? ☐ Yes ☐ No

9. For POU changes: ☒ N/A Is it likely the original place of use would continue to receive water from the same source? ☐ Yes ☐ No If "Yes", explain:

10. For POU or USE changes: ☒ N/A In your best judgment, would use of the existing right at "full face value," result in the diversion of more water than can be used beneficially and without waste? ☐ Yes ☐ No If "Yes", explain:

11. For POU changes that involve micro-irrigation: ☒ N/A

- a. Has the applicant made changes (absent a transfer) to convert to micro-irrigation within the current place of use boundary of the water right proposed for transfer, and previously demonstrated to the Department through monitoring and site inspections by the Watermaster that the proposed transfer will not result in injury or enlargement?

☐ Yes ☐ No If "Yes", explain:

- b. Has a temporary transfer of this nature been previously filed and approved on the same lands (or portions thereof) as those lands involved in this transfer?

☐ Yes ☐ No If "Yes", answer the following:

- i. Were there any problems with more acres being irrigated (or wetted) than were authorized under the temporary transfer? ☐ Yes ☐ No If "Yes", explain:
- ii. Did the designated areas that were to remain dry (or not wetted) under the temporary transfer actually remain dry? ☐ Yes ☐ No If "No", explain:
- iii. Did the applicant comply with and meet all of the conditions of the temporary transfer? ☐ Yes ☐ No If "No", explain:
- iv. Do you have any other observations regarding the temporary transfer? ☐ Yes ☐ No If "Yes", describe:
- v. Did the applicant demonstrate to the Department through monitoring and site inspections by the Watermaster that neither injury nor enlargement occurred as a result of the temporary transfer? ☐ Yes ☐ No If "No", explain:

- c. To the best of your knowledge, if this transfer is approved, does it appear that:

- i. "Injury" will occur to other water rights that share the same source?

☐ Yes ☐ No If "Yes", explain:

- ii. "Enlargement" of the water right being transferred will occur?

☐ Yes ☐ No If "Yes", explain:

12. Are there other issues not identified through the above questions that should be considered in determining whether the change "can be effected without injury to other rights"?

☐ Yes ☒ No If "Yes", explain:

13. What alternatives may be available for addressing any issues identified above:

14. Do conditions need to be included in the transfer order to avoid enlargement of the right or injury to other rights? ☐ No ☒ Yes, as checked and provided below:

☐ For POU changes that involve micro-irrigation, provide the monitoring and reporting conditions necessary to prevent injury/enlargement:

☐ A Headgate should be required prior to diverting water.

☒ Measurement Devices for POD or POA: (if this condition is selected, also fill in the top sections of Page 4)

*a. Before water use may begin under this order, the water user shall install a **totalizing flow meter***, or, with prior approval of the Director, another suitable measuring device, ☒ at each point of diversion/appropriation (new and existing) OR at each new point of diversion/appropriation ☐ with the exception that water rights issued to the Bureau of Reclamation or an irrigation district (or similar entity) are not subject to this condition.*

b. The water user shall maintain the meters or measuring devices in good working order.

c. The water user shall allow the Watermaster access to the meters or measuring devices; provided however, where the meters or measuring devices are located within a private structure, the Watermaster shall request access upon reasonable notice.

☐ Reservoir water use measurement: (if this condition is selected, also fill in the top sections of Page 4)

*a. Before water use may begin under this order, the water user shall install **staff gages***, or, with prior approval of the Director, other suitable measuring devices, that measure the entire range and stage between empty and full in each reservoir. Staff gages shall be United States Geological Survey style.*

b. Before water use may begin under this order, if the reservoir is located in channel, weirs or other suitable measuring devices must be installed upstream and downstream of the reservoir, and, an adjustable outlet valve must be installed. The water user shall maintain such devices in good working order. A written waiver may be obtained, if in the judgment of the Director, the installation of weirs or other suitable measuring devices, or the adjustable outlet valve, will provide no public benefit.

* The following alternative device(s) should be substituted for the bold, underlined device in the above selected condition:

☐ Weir
☐ Parshall Flume
☐ Other: _____

☐ Submerged Orifice
☐ Flow Restrictor

Oregon Water Resources Department

Measurement Condition Information for the Applicant

(To be sent with the Draft Preliminary Determination or Final Order)

Transfer #: T- 14450



In order to avoid enlargement of the right or injury to other rights, a **totalizing flow meter** will be required to be installed **prior to diversion of water**, as a condition of this transfer:



at each point of diversion/appropriation (new and existing) OR



at each new point of diversion/appropriation.

For additional information, or to obtain approval of a different type of measurement device, the applicant should contact the area Watermaster:

Watermaster name: **Jake Constans**

District: **18**

Address: **1400 SW Walnut Street #240**

City/State/Zip: **Hillsboro, OR 97123**

Phone: **503-846-7780**

Email: **jake.w.constans@water.oregon.gov**

Note: *If a device other than the one specified in the Preliminary Determination or Final Order is approved by the Watermaster, fill out and mail the form below to the Salem office.*

Approval of an Alternate Measurement Device

T-

(to be filled out after consultation with the applicant, or after a site visit)

On behalf of the Director, I authorize use of the following suitable alternate measurement device:

Watermaster signature

District

Date

If this form is used for approval of an alternative measurement device, it must be mailed to:

Oregon Water Resources Department
725 Summer Street NE, Suite A
Salem, OR 97301-1266

STATE OF OREGON
WATER RESOURCES DEPARTMENT

725 Summer St. N.E. Ste. A
SALEM, OR 97301-4172
(503) 986-0900 / (503) 986-0904 (fax)

RECEIPT # 142942

INVOICE # _____

RECEIVED FROM: City of Benson
BY: _____

APPLICATION	
PERMIT	
TRANSFER	T-14450

CASH: ☐ CHECK:# 26996 OTHER: (IDENTIFY) ☐

TOTAL REC'D \$2,820.02

1083 TREASURY 4170 WRD MISC CASH ACCT

0407 COPIES 47124 R 11500-25 \$
0412 OTHER: (IDENTIFY) Transfer R.A. \$2,820.02

0243 I/S Lease _____ 0244 Muni Water Mgmt. Plan _____ 0245 Cons. Water _____

4270 WRD OPERATING ACCT

MISCELLANEOUS

0407	COPY & TAPE FEES	\$
0410	RESEARCH FEES	\$
0408	MISC REVENUE: (IDENTIFY) _____	\$
TC162	DEPOSIT LIAB. (IDENTIFY) _____	\$
0240	EXTENSION OF TIME	\$

WATER RIGHTS:

0201	SURFACE WATER	EXAM FEE	0202	RECORD FEE
0203	GROUND WATER	\$	0204	\$
0205	TRANSFER	\$		

WELL CONSTRUCTION

0218	WELL DRILL CONSTRUCTOR	EXAM FEE	0219	LICENSE FEE
	LANDOWNER'S PERMIT	\$	0220	\$

OTHER (IDENTIFY) _____

0536 TREASURY 0437 WELL CONST. START FEE

0211	WELL CONST START FEE	\$	CARD#	
0210	MONITORING WELLS	\$	CARD#	

OTHER (IDENTIFY) _____

0607 TREASURY 0467 HYDRO ACTIVITY LIC NUMBER

0233	POWER LICENSE FEE (FW/WRD)	\$
0231	HYDRO LICENSE FEE (FW/WRD)	\$
	HYDRO APPLICATION	\$

TREASURY OTHER / RDX

FUND _____ TITLE _____

OBJ. CODE _____ VENDOR # _____

DESCRIPTION _____ \$

RECEIPT: 142942

DATED: 5/17/24 BY: Lucy D Miller

Distribution - White Copy - Customer, Yellow Copy - Fiscal, Blue Copy - File, Buff Copy - Fiscal

MAY 17 2024

Salem, OR

**REIMBURSEMENT AUTHORITY
APPLICANT'S AGREEMENT
Contract Number: R11-500-25**

This Agreement is between the **Oregon Water Resources Department**, hereafter OWRD, and **City of Banks**, hereafter Applicant, hereafter known together as the parties.

OWRD Information	Applicant's Information	Applicant's Representative
Contact: Kelly Starnes	Name: City of Banks	Name: CwM-H2O, LLC
Title: Transfer Advisor	Contact: Jolynn Becker, City Manager	Contact: Bob Long, CWRE
Address: 725 Summer Street, NE, Suite A Salem, OR 97301-1266	Address: 13680 NW Main Street Banks, OR 97106	Address: 311 B Avenue, Suite P Lake Oswego, OR 97034
Phone: 503 979-3511	Phone:	Phone: (503) 954-1326
Fax: 503 986-0901	Fax:	Fax:
Email: patrick.k.starnes@water.oregon.gov	Email: jbecker@cityofbanks.org	Email: bob.long@cwmh2o.com

Purpose The purpose of this Agreement is to expedite the processing of the **Transfer Application**. (**Application Number: T-14450**)

1. **Authority.** The OWRD has been authorized pursuant to ORS 536.055 to enter into a voluntary agreement with any applicant, permittee or regulated entity (collectively Applicant) for expediting or enhancing a regulatory process. In making this agreement, OWRD shall require the applicant to pay the full cost of expedited process.
2. **Restrictions.** Applicant and OWRD agree that this Agreement shall not be construed to restrict in any way the decisions and actions by OWRD. OWRD shall be free to exercise independent judgment consistent with existing laws and regulations.
3. **Effective Date and Duration.** Unless otherwise terminated by non-deposit of funds by the Applicant, this Agreement shall become effective on the date on which both parties have signed the Agreement and the full deposit of the estimated cost of the proposed service.
4. **Consideration.**
 - a. Applicant shall pay OWRD in advance for actual costs incurred by OWRD. The estimated maximum reimbursement payable to OWRD under this Agreement is **\$2,820.02**. Applicant agrees to pay the full amount of **\$2,820.02** to OWRD prior to commencement of any work stated in this Agreement. This payment will be placed in an account administered by OWRD and drawn upon as costs are actually incurred. If the actual cost of performing the work is less than payments received, OWRD will refund the unspent balance. If the actual cost of processing exceeds the estimate, the Applicant can either elect to terminate this Agreement or amend the Agreement to reflect the increase in cost.
 - b. The costs stated in this Agreement do not include the statutory application processing and filing fees.
5. **Confidentiality.** Applicant agrees that any information provided to or acquired by OWRD under this Agreement will be subject to the Oregon Public Records Law and shall be considered public records.
6. **Indemnity.** Applicant shall defend, save, hold harmless, and indemnify the State of Oregon, OWRD, and their officers, employees, and agents from and against all claims, suits, actions, losses, damages, liabilities, costs, and expenses of any nature resulting from or arising out of, or relating to the activities of Applicant or its representatives, officers, employees, contractors, or agents under this Agreement or with respect to the expedited service. The Applicant acknowledges that the Oregon Water Resources Department cannot and does not guarantee a favorable review under the subject regulatory process.

7. **Termination by Applicant.** Applicant may request to terminate this agreement only in writing at anytime during the process. The Applicant agrees to pay for the work done by OWRD up until the time of the written termination request. OWRD, upon receiving such written termination request from the Applicant, will refund any unspent balance.
8. **Termination by OWRD.** OWRD may terminate this Agreement if the applicant fails to provide any requested items necessary to complete the application and/or comply with applicable rule requirements within the specified timeframe outlined in the request letter, being a period of not less than 30 days.
9. **Funds Authorized and Available.** By its execution of this Agreement, Applicants certify that sufficient funds are authorized and available to cover the expenditures contemplated by this Agreement.
10. **Duration of Estimate.** The Estimate of Time to completion is **approximately** 120 days once this Agreement has been fully executed and payment of the estimated cost deposited. If the Applicant's Agreement is not received by the Department within thirty (30) days of mailing the Agreement, the Applicant may need to re-apply for a new estimate. NOTE: Any time estimate is approximate; No guarantee of Final Order issuance of a date is certain. Duration estimates do not include any statutory waiting periods.
10. **Completion Date.** OWRD, by the execution of this Agreement does not guarantee the completion date indicated in this Agreement. Completion date is only an estimate and may be affected by the Department's workload, issues arising from the processing of the requested services and Applicant's timely response to requests for additional information.
11. **Captions.** The captions or headings in this Agreement are for the convenience only and in no way define, limit, or describe the scope, or intent, of any provision of this Agreement.
12. **Amendment and Merger.** The terms of this Agreement shall not be waived, altered, modified, supplemented, or amended in any manner whatsoever, except by written instrument signed by both parties. Such waiver, consent, modification or change, if made, shall be effective only in the specific instance and for the specific purpose given. There are no understandings, agreements or representations, oral or written, not specified herein regarding this Agreement.
13. **Signatures.** All parties, by the authorized representative's signature below, hereby acknowledge that they have read this Agreement, understand it and agree to be bound by its terms and conditions.

For Applicant: John Beck
Name/Title: City Manager

For OWRD: Dwight French
Dwight French – Administrator

5-14-24
Date

5-29-2024
Date

Mail signed Agreement to:

Stacy Phillips
Oregon Water Resources Department
725 Summer Street NE, Suite A
Salem, OR 97301-1266

Received by OWRD

MAY 17 2024

Salem, OR

CITY OF BANKS RA R11-500-25 T-14450						
Review Step						
Front Desk Staff receipts received AA funds						
Transfer Support process Application						
Administrator signs AA						
NRS 1 Support enters workflow record in WRIS and updates RA spreadsheet						
NRS 2 completes initial review of file for deficiencies						
NRS 2 consults with Analyst and/or Manager						
NRS 2 writes and sends deficiency ltr (email and hard copy)						
NRS 2 addresses correspondence from app/agent regarding deficiencies						
Watermaster completes review						
Groundwater completes review						
NRS 2 completes DPD, PN, and RR						
Transfer staff peer reviews DPD, PN, RR						
Transfer Analyst completes policy check at DPD stage						
NRS 2 sends DPD to app/agent by email and/or mail						
NRS 2 completes PD						
Transfer Staff peer reviews PD						
Transfer Analyst peer reviews PD						
Data Center reviews PD AND RR: (RR where applicable)						
Transfer Analyst completes peer review of PN review for newspaper noticing						
Transfer Support requests newspaper quote for PN publishing						
NRS 2 sends publishing fee request to applicant						
Transfer Support processes fee and newspaper publishing						
Transfer Support processes public notice (dept notice)						
Administrator signs PD						
NRS 2 completes FO						
Transfer Staff peer reviews FO						
Transfer Analyst peer reviews FO						
Administrator signs FO						
Transfer Support issues FO, updates WRIS, copy to file, record markings, and sends hard copy						
NRS 1 closes out RA Contract						
TOTAL ESTIMATED HOURS			43.96			
					TOTAL	\$2,820.02

STATE OF OREGON
WATER RESOURCES DEPARTMENT

725 Summer St. N.E. Ste. A
SALEM, OR 97301-4172

(503) 986-0900 / (503) 986-0904 (fax)

RECEIPT # 142818

INVOICE # _____

RECEIVED FROM: City of Banks
BY: _____

APPLICATION	
PERMIT	
TRANSFER	T-14450

CASH: ☐ CHECK: # 26907 OTHER: (IDENTIFY) ☐

TOTAL REC'D \$ 125.00

1083 TREASURY 4170 WRD MISC CASH ACCT

0407 COPIES 47124 R11500-25 \$
0412 OTHER: (IDENTIFY) T-14450 R-1 \$ 125.00
0243 I/S Lease _____ 0244 Muni Water Mgmt. Plan _____ 0245 Cons. Water _____

4270 WRD OPERATING ACCT

MISCELLANEOUS

0407	COPY & TAPE FEES	\$
0410	RESEARCH FEES	\$
0408	MISC REVENUE: (IDENTIFY) _____	\$
TC162	DEPOSIT LIAB. (IDENTIFY) _____	\$
0240	EXTENSION OF TIME	\$

WATER RIGHTS:

0201	SURFACE WATER	EXAM FEE	0202	RECORD FEE
0203	GROUND WATER	\$	0204	\$
0205	TRANSFER	\$		

WELL CONSTRUCTION

0218	WELL DRILL CONSTRUCTOR	EXAM FEE	0219	LICENSE FEE
	LANDOWNER'S PERMIT	\$	0220	\$

OTHER (IDENTIFY) _____

0536 TREASURY 0437 WELL CONST. START FEE

0211	WELL CONST START FEE	\$	CARD#	
0210	MONITORING WELLS	\$	CARD#	
	OTHER (IDENTIFY) _____			

0607 TREASURY 0467 HYDRO ACTIVITY LIC NUMBER

0233	POWER LICENSE FEE (FW/WRD)	\$
0231	HYDRO LICENSE FEE (FW/WRD)	\$
	HYDRO APPLICATION	\$

TREASURY OTHER / RDX

FUND _____ TITLE _____
OBJ. CODE _____ VENDOR # _____
DESCRIPTION _____ \$ _____

RECEIPT: 142818

DATED: 4-29-2024 BY: Lee D Miller

Distribution - White Copy - Customer, Yellow Copy - Fiscal, Blue Copy - File, Buff Copy - Fiscal

OREGON WATER RESOURCES DEPARTMENT
TRANSFER REIMBURSEMENT AUTHORITY
ESTIMATE APPLICATION



ORS 536.055 authorizes the Oregon Water Resources Department to expedite or enhance regulatory processes voluntarily requested under the agreement.

Please contact Transfer Staff before submitting this request, as the application fee of \$125.00 per request is non-refundable.

Checks submitted for this application must be separate from Transfer fees.

The purpose of this application is to obtain estimates of the cost and time required to process a Transfer Application Request. There is a non-refundable application fee of \$125.00 per request.

REQUEST	TYPE	FILE NUMBER
☒	Transfer Application	T-14450 Transfer Number Not Yet Assigned (Cert. 95849)

Applicant Information		Applicant's Representative/Contact
Name:	City of Banks (Jolynn Becker, City Manager)	Bob Long, CWRE (CwM-H2O, LLC)
Address:	13680 NW Main Street	311 B Avenue, Suite P
	Banks, OR 97106	Lake Oswego, OR 97034
Phone:		(503) 954 – 1326
Fax:		
E-Mail Address:	jbecker@cityofbanks.org	Bob.long@cwmmh2o.com

By signing this application, I understand:

- That upon receipt of my non-refundable application fee of \$125.00, OWRD will, within fourteen (14) days, notify me in writing of the estimate of costs and time frame for the expedited service.
- That this fee covers the reimbursement authority staff to evaluate and provide the estimate for processing of the request.
- That upon receiving the estimate, I may agree or decline to enter into a formal contract to pay the estimated cost in advance to initiate the expedited service.
- That an incomplete or inaccurate application may delay the process and increase the cost to process my request.
- That expedited processing does not guarantee a favorable review of my request.

I certify that I am the (check one):

☒ Applicant ☐ Applicant's Representative ☐ Other (Please specify)

Name:

Signature: Jolynn Becker

Send completed Application and payment to:

Oregon Water Resources Department
Transfer Reimbursement Authority Program
725 Summer St. NE, Suite A
Salem, OR 97301-1271

Received
APR 29 2024
OWRD

OWRD USE ONLY: Reimbursement Authority Number: R11-500-25



Oregon

Tina Kotek, Governor

Water Resources Department

North Mall Office Building

725 Summer St NE, Suite A

Salem, OR 97301

Phone 503 986-0900

Fax 503 986-0904

May 7, 2024

Jolynn Becker

13680 NW Main St

Banks, OR 97106

Reference: Application T-14450

On April 29, 2024, the Department received your water right Permanent Transfer Application. The application was accompanied by \$3890.00. Receipt number 142828 is enclosed.

By copy of this letter, we are asking the Watermaster for a report regarding the potential for injury to existing water rights which may be caused by the requested change. A review form will also be sent to our groundwater staff to determine whether the proposed well accesses the same source of water as the original well.

This application may require publication of a notice for two consecutive weeks in a newspaper with general circulation in the area where the water right is located. If it is determined that newspaper notice will be required, the Department will prepare the notice and notify you of the cost. You will be responsible for submitting payment to the Department prior to publication of the notice.

Except as provided under ORS 540.510(3) for municipalities, you may not use water from the new point of appropriation until a final order approving the transfer application has been issued by the Department. In order to avoid any possible forfeiture of the water right, you should continue to use the water as described by your existing water right.

If the land is sold before the application is approved, the buyer's consent to the application will be required unless a recorded deed or other legal document clearly established that the water right was not conveyed in the sale.

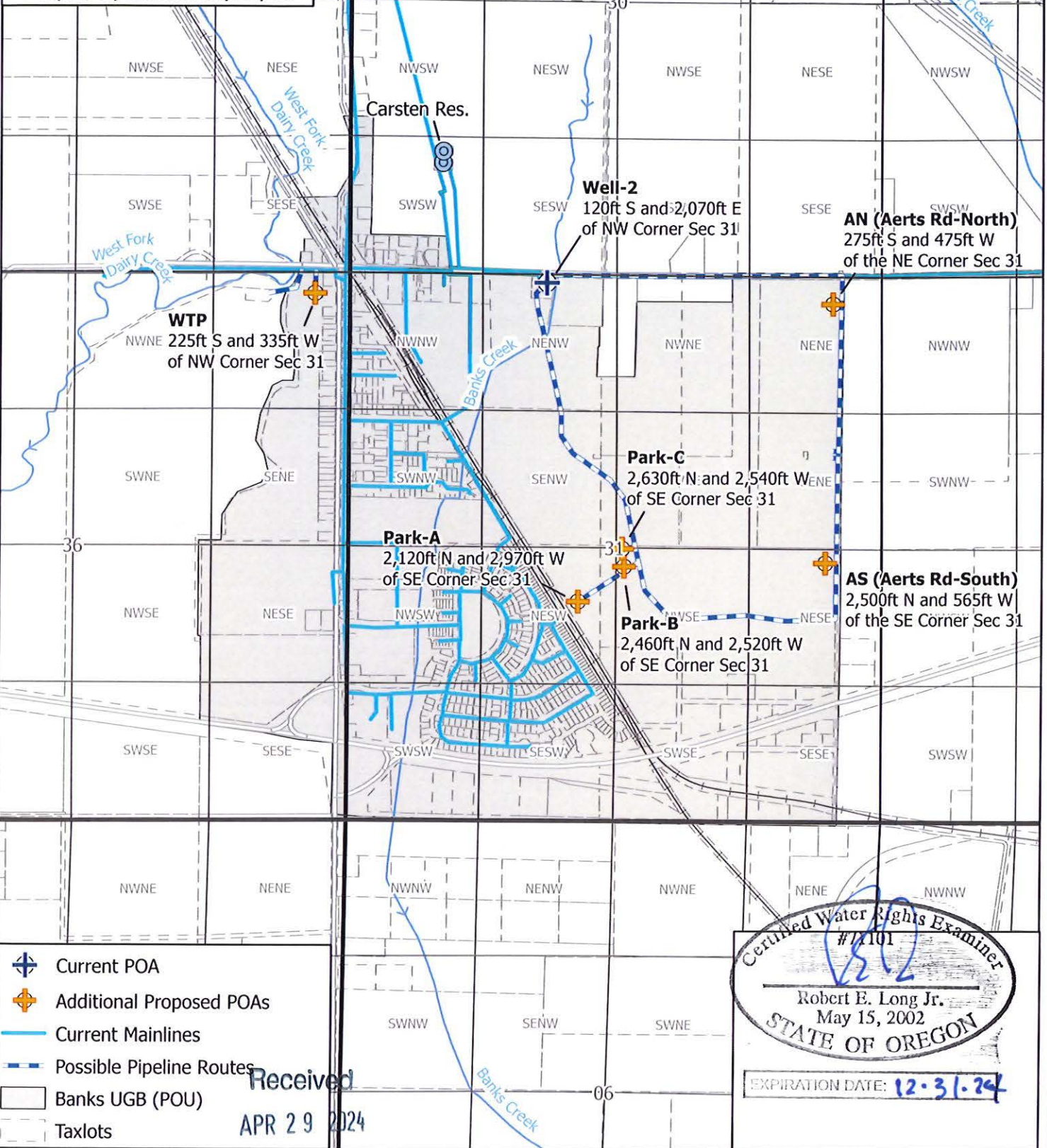
Refer to the following page for a chart showing the steps and expected timelines for the processing of your application.

If you have any questions, please contact the Transfer Section at (503) 986-0935.

Cc: Watermaster Dist. #18, Jacob W. Constans (*via email*)
Bob Long, Agent

Enclosure

Permanent Transfer Cert. 95849
T2N, R3W, Section 30, 31, 36



CWM-H2O
 Complete Water Management

311 B Avenue, Suite P
 Lake Oswego, Oregon 97034
 (503) 954-1326

OWHD

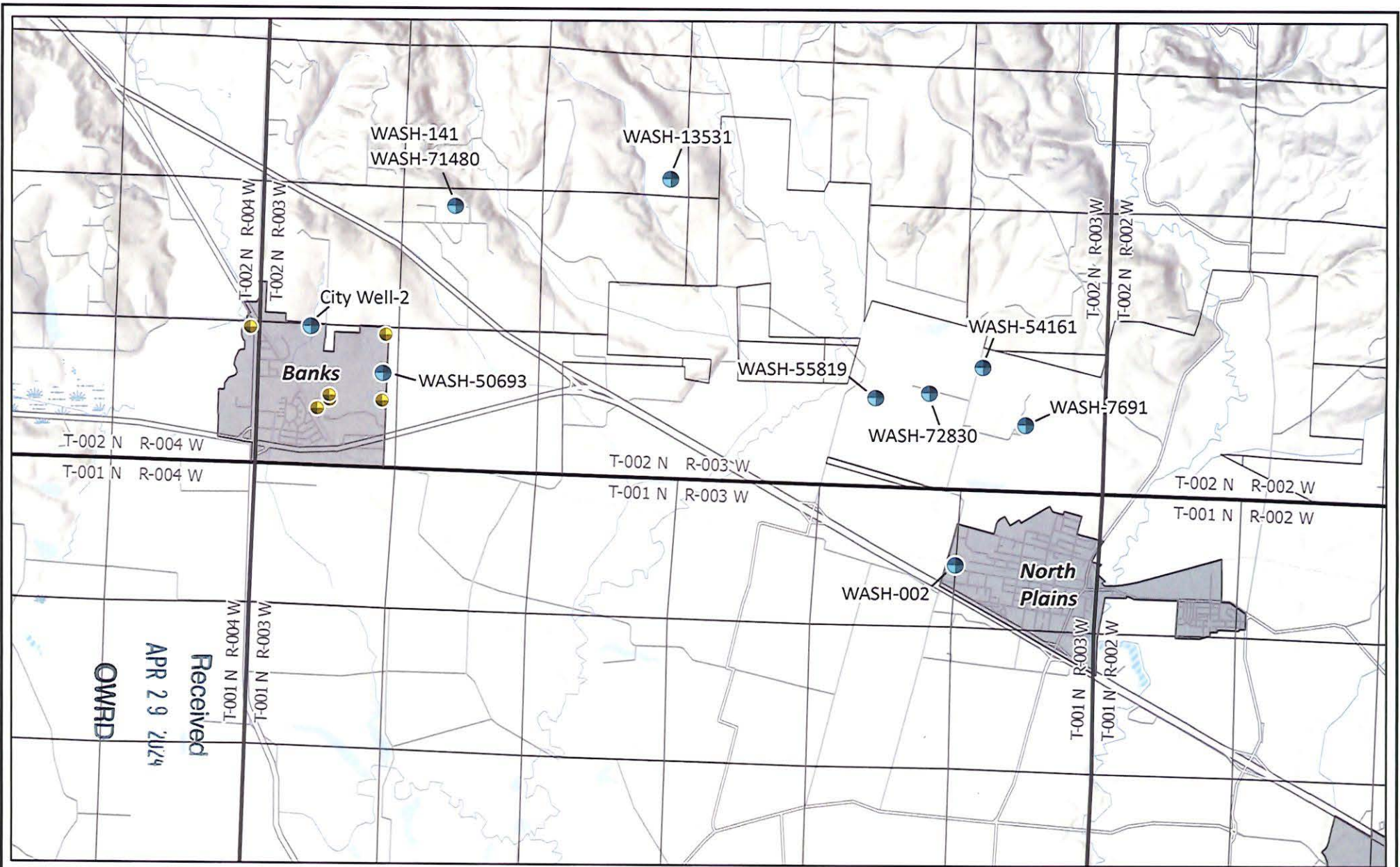
Figure 1
Permanent Transfer Map
Certificate 95849 - City of Banks

1	DATE	AUTH	DRAFT
No.	Date	By	Revisions

N 0 500 1,000 2,000 ft
 Scale: 1" = 1,320'

Proj#: 1501007
Banks Eastside
 City of Banks
 13680 NW Main Street
 Banks, OR 97106

14450-



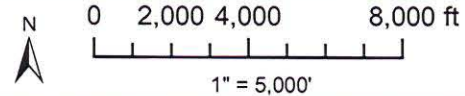
Received
APR 29 2024
OWRD



1319 SE MLK Jr. Blvd, Suite 204
Portland, Oregon 97214
(503) 954-1326

**Figure 1
Vicinity Map**

1	DATE	AUTH	DRAFT
No.	Date	By	Revisions



Proj#: 1501009
City of Banks Hydrogeology
City of Banks
13680 NW Main Street
Banks, OR 97106

- Reference Basalt Wells
- Additional Proposed POAs
- Urban Growth Boundaries
- Township-Range
- Section

14450-

STATE OF OREGON
WATER RESOURCES DEPARTMENT

725 Summer St. N.E. Ste. A

SALEM, OR 97301-4172

(503) 986-0900 / (503) 986-0904 (fax)

RECEIPT # 142828

INVOICE # _____

RECEIVED FROM: City of Bonaville

BY: _____

APPLICATION	
PERMIT	
TRANSFER	T-14450

CASH: ☐ CHECK:# 26906 OTHER: (IDENTIFY) ☐

TOTAL REC'D \$ 3890.00

1083 TREASURY 4170 WRD MISC CASH ACCT

0407 COPIES \$
OTHER: (IDENTIFY) \$

0243 I/S Lease 0244 Muni Water Mgmt. Plan 0245 Cons. Water

4270 WRD OPERATING ACCT

MISCELLANEOUS

0407 COPY & TAPE FEES \$
0410 RESEARCH FEES \$
0408 MISC REVENUE: (IDENTIFY) \$
TC162 DEPOSIT LIAB. (IDENTIFY) \$
0240 EXTENSION OF TIME \$

WATER RIGHTS:

0201 SURFACE WATER EXAM FEE 0202 RECORD FEE \$
0203 GROUND WATER EXAM FEE 0204 RECORD FEE \$
0205 TRANSFER EXAM FEE \$3,890.00

WELL CONSTRUCTION

0218 WELL DRILL CONSTRUCTOR EXAM FEE 0219 LICENSE FEE \$
LANDOWNER'S PERMIT 0220 LICENSE FEE \$

OTHER (IDENTIFY)

0536 TREASURY 0437 WELL CONST. START FEE

0211 WELL CONST START FEE \$ CARD#
0210 MONITORING WELLS \$ CARD#

OTHER (IDENTIFY)

0607 TREASURY 0467 HYDRO ACTIVITY LIC NUMBER

0233 POWER LICENSE FEE (FW/WRD) \$
0231 HYDRO LICENSE FEE (FW/WRD) \$
HYDRO APPLICATION \$

TREASURY OTHER / RDX

FUND TITLE
OBJ. CODE VENDOR #
DESCRIPTION \$

RECEIPT: 142828

DATED: 4-29-2024 BY: Lin D. Miller

Distribution - White Copy - Customer, Yellow Copy - Fiscal, Blue Copy - File, Buff Copy - Fiscal

Application for Permanent Water Right Transfer

Part 1 of 5 – Minimum Requirements Checklist



Oregon Water Resources Department
725 Summer Street NE, Suite A
Salem, Oregon 97301-1266
(503) 986-0900
www.oregon.gov/OWRD

This transfer application will be returned if Parts 1 through 5 and all required attachments are not completed and included.

For questions, please call (503) 986-0900, and ask for Transfer Section.

Received

Check all items included with this application. (N/A = Not Applicable)

APR 29 2024



Part 1 – Completed Minimum Requirements Checklist.

OWRD



Part 2 – Completed Transfer Application Map Checklist.



Part 3 – Application Fee, payable by check to the Oregon Water Resources Department, and completed Fee Worksheet, page 3: **\$3,890**



Part 4 – Completed Applicant Information and Signature.



Part 5 – Information about Water Rights to be Transferred: **How many water rights are to be transferred? 1 List them here: Certificate 95849**

Please include a separate Part 5 for each water right. (See instructions on page 6)

NOTE: A separate transfer application is required for each water right unless the criteria in OAR 690-380-3220 are met.

Attachments:



Completed Transfer Application Map. (Attachment 1)



Completed Evidence of Use Affidavit and supporting documentation. (Attachment 2)



N/A Affidavit(s) of Consent from Landowner(s) (if the applicant does not own the land the water right is on.) (Attachment 3 – Landowner Consent Forms)



N/A Supplemental Form D – For water rights served by or issued in the name of an irrigation district. Complete when the transfer applicant is not the irrigation district.



N/A Oregon Water Resources Department's Land Use Information Form with approval and signature from each local land use authority in which water is to be diverted, conveyed, and/or used. Not required if water is to be diverted, conveyed, and/or used only on federal lands or if all of the following apply: a) a change in place of use only, b) no structural changes, c) the use of water is for irrigation only, and d) the use is located within an irrigation district or an exclusive farm use zone. (Attachment 4)



N/A Water Well Report/Well Log for changes in point(s) of appropriation (well(s)) or additional point(s) of appropriation. (Attachment 5, Attachment 6 – Basalt Aquifer Memo)



N/A Geologist Report for a change from a surface water point of diversion to a ground water point of appropriation (well), if the proposed well is more than 500' from the surface water source and more than 1000' upstream or downstream from the point of diversion. See OAR 690-380-2130 for requirements and applicability.

(For Staff Use Only)

WE ARE RETURNING YOUR APPLICATION FOR THE FOLLOWING REASON(S):

___ Application fee not enclosed/insufficient

___ Map not included or incomplete

___ Land Use Form not enclosed or incomplete

___ Evidence of Use Form not enclosed or incomplete

___ Additional signature(s) required

___ Part ___ is incomplete

Other/Explanation _____

Staff: _____ 503- _____ Date: ____/____/____

Part 2 of 5 – Transfer Application Map

Your transfer application will be returned if any of the map requirements listed below are not met.

Please be sure that the transfer application map you submit includes all the required items and matches the existing water right map. Check all boxes that apply.

- ☒ ☐ N/A Certified Water Right Examiner (CWRE) Stamp and Original Signature. For a list of CWREs, see http://apps.wrd.state.or.us/apps/wr/cwre_license_view/. CWRE stamp and signature are not required for substitutions.
- ☐ ☒ N/A If more than three water rights are involved, separate maps are needed for each water right.
- ☒ Permanent quality printed with dark ink on good quality paper.
- ☒ The size of the map can be 8½ x 11 inches, 8½ x 14 inches, 11 x 17 inches, or up to 30 x 30 inches. For 30 x 30 inch maps, one extra copy is required.
- ☒ A north arrow, a legend, and scale.
- ☒ The scale of the map must be: 1 inch = 400 feet, 1 inch = 1,320 feet, the scale of the Final Proof/Claim of Beneficial Use Map (the map used when the permit was certificated), the scale of the county assessor map if the scale is not smaller than 1 inch = 1,320 feet, or a scale that has been pre-approved by the Department.
- ☒ Township, Range, Section, ¼ ¼, DLC, Government Lot, and other recognized public land survey lines.
- ☒ Tax lot boundaries (property lines) are required. Tax lot numbers are recommended.
- ☒ Major physical features including rivers and creeks showing direction of flow, lakes and reservoirs, roads, and railroads.
- ☒ Major water delivery system features from the point(s) of diversion/appropriation such as main pipelines, canals, and ditches.
- ☒ Existing place of use that includes separate hachuring for each water right, priority date, and use including number of acres in each quarter-quarter section, government lot, or in each quarter-quarter section as projected within government lots, donation land claims, or other recognized public land survey subdivisions. If less than the entirety of the water right is being changed, a separate hachuring is needed for lands left unchanged.
- ☒ ☐ N/A Proposed place of use that includes separate hachuring for each water right, priority date, and use including number of acres in each quarter-quarter section, government lot, or in each quarter-quarter section as projected within government lots, donation land claims, or other recognized public land survey subdivisions.
- ☒ Existing point(s) of diversion or well(s) with distance and bearing or coordinates from a recognized survey corner. This information can be found in your water right certificate or permit.
- ☒ ☐ N/A If you are proposing a change in point(s) of diversion or well(s), show the proposed location and label it clearly with distance and bearing or coordinates. If GPS coordinates are used, latitude-longitude coordinates may be expressed as either degrees-minutes-seconds with at least one digit after the decimal (example – 42°32'15.5") or degrees-decimal with five or more digits after the decimal (example – 42.53764°).

Received

APR 29 2024

14450 ACS

OWRD

Part 3 of 5 – Fee Worksheet

FEE WORKSHEET for PERMANENT TRANSFER (except Substitution)

1	Base Fee (includes one type of change to one water right for up to 1 cfs)	1	\$1,360
	Types of change proposed: ☐ Place of Use ☐ Character of Use ☒ Point of Diversion/Appropriation Number of above boxes checked = <u>1 (2a)</u> Subtract 1 from the number in line 2a = <u>0 (2b)</u> <i>If only one change, this will be 0</i>		
2	Multiply line 2b by \$1090 and enter »	2	0
	Number of water rights included in transfer <u>1 (3a)</u> Subtract 1 from the number in line 3a above: <u>0 (3b)</u> <i>If only one water right this will be 0</i>		
3	Multiply line 3b by \$610 and enter »	3	0
	Do you propose to add or change a well, or change from a surface water POD to a well? ☐ No: enter 0 ☒ Yes: enter \$480 for the 1 st well to be added or changed <u>\$480 (4a)</u> Do you propose to add or change additional wells? ☐ No: enter 0 ☒ Yes: multiply the number of additional wells by \$410 <u>\$2,050 (4b)</u>		
4	Add line 4a to line 4b and enter » » » » » » » » » » » » » » » » » »	4	\$2,530
	Do you propose to change the place of use or character of use? ☒ No: enter 0 on line 5 ☐ Yes: enter the cfs for the portions of the rights to be transferred (see below*): _____ (5a) Subtract 1.0 from the number in line 5a above: _____ (5b) If 5b is 0 or less, enter 0 on line 5 » If 5b is greater than 0, round up to the nearest whole number: _____ (5c) and multiply		
5	5c by \$410, then enter on line 5 »	5	0
6	Add entries on lines 1 through 5 above » » » » » » » » » Subtotal:	6	\$2,530
	Is this transfer: ☐ necessary to complete a project funded by the Oregon Watershed Enhancement Board (OWEB) under ORS 541.932? ☐ endorsed in writing by ODFW as a change that will result in a net benefit to fish and wildlife habitat? If one or more boxes is checked, multiply line 6 by 0.5 and enter on line 7 »		
7	If no box is applicable, enter 0 on line 7 »	7	0
8	Subtract line 7 from line 6 » Transfer Fee:	8	\$3,890

*Example for Line 5a calculation to transfer 45.0 acres of Primary Certificate 12345 (total 1.25 cfs for 100 acres) and 45.0 acres of Supplemental Certificate 87654 (1/80 cfs per acre) on the same land:

1. For irrigation calculate cfs for each water right involved as follows:
 - a. Divide total authorized cfs by total acres in the water right (for C12345, $1.25 \text{ cfs} \div 100 \text{ ac}$); then multiply by the number of acres to be transferred to get the transfer cfs ($\times 45 \text{ ac} = 0.56 \text{ cfs}$).
 - b. If the water right certificate does not list total cfs, but identifies the allowable use as 1/40 or 1/80 of a cfs per acre; multiply number of acres proposed for change by either 0.025 (1/40) or 0.0125 (1/80). (For C87654, $45.0 \text{ ac} \times 0.0125 \text{ cfs/ac} = 0.56 \text{ cfs}$)
2. Add cfs for the portions of water rights on all the land included in the transfer; however **do not count cfs for supplemental rights on acreage for which you have already calculated the cfs fee for the primary right on the same land**. The fee should be assessed only once for each "on the ground" acre included in the transfer. (In this example, blank 5a would be only 0.56 cfs, since both rights serve the same 45.0 acres. Blank 5b would be 0 and Line 5 would then also become 0).

FEE WORKSHEET for SUBSTITUTION

1	Base Fee (includes change to one well)	1	\$990.00
	Number of wells included in substitution _____ (2a) Subtract 1 from the number in 2a above: _____ (2b) <i>If only one well this will be 0</i>		
2	Multiply line 2b by \$480 and enter » » » » » » » » » » » » » » »	2	
3	Add entries on lines 1 through 2 above » » » » » » Fee for Substitution:	3	

Received

Part 4 of 5 – Applicant Information and Signature

Applicant Information

APPLICANT/BUSINESS NAME City of Banks (Jolynn Becker, City Manager)		PHONE NO.	ADDITIONAL CONTACT NO.
ADDRESS 13680 NW Main Street		FAX NO.	
CITY Banks	STATE OR	ZIP 97106	E-MAIL jbecker@cityofbanks.org
BY PROVIDING AN E-MAIL ADDRESS, CONSENT IS GIVEN TO RECEIVE ALL CORRESPONDENCE FROM THE DEPARTMENT ELECTRONICALLY. COPIES OF THE FINAL ORDER DOCUMENTS WILL ALSO BE MAILED.			

Agent Information – The agent is authorized to represent the applicant in all matters relating to this application.

AGENT/BUSINESS NAME Bob Long, (CWRE, RG, RHG) CwM-H2O, LLC		PHONE NO. 503-954-1626	ADDITIONAL CONTACT NO.
ADDRESS 311 B Ave, Suite P		FAX NO.	
CITY Lake Oswego	STATE OR	ZIP 97034	E-MAIL bob.long@cwmmh2o.com
BY PROVIDING AN E-MAIL ADDRESS, CONSENT IS GIVEN TO RECEIVE ALL CORRESPONDENCE FROM THE DEPARTMENT ELECTRONICALLY. COPIES OF THE FINAL ORDER DOCUMENTS WILL ALSO BE MAILED.			

Explain in your own words what you propose to accomplish with this transfer application, and why:

City of Banks Certificate 95849 currently has only one approved point of appropriation (POA), Well-2. The purpose of this transfer application is to add additional POA locations to the Well-2 water right. Having multiple wells under Certificate 95849 will allow the City to optimize production under this right and limit peak summertime drawdowns in the basalt aquifer due to production from a single POA (Well-2) by distributing more moderate production across a multi-well system. The City also desires to implement an Aquifer Storage and Recovery (ASR) program to further protect the groundwater resource while developing additional peak-season supply capacity. This ASR program will require additional wells for injection and recovery.

This transfer application includes 6 additional POA locations. The City intends to develop between 1 and 3 new wells on Certificate 95849, though the precise locations are not yet known. Adding the 6 proposed locations will give the City the flexibility to move forward with well construction planning and negotiations with landowners at the selected sites. The proposed POAs are located on property not owned by the City. The City is currently in negotiations to purchase the land at one of the proposed locations (WTP). Landowner consent has been granted for the City to develop the remaining five proposed well locations, as documented in the attached consent forms.

Check One Box

- ☐ By signing this application, I understand that, upon receipt of the draft preliminary determination and prior to Department approval of the transfer, I will be required to provide landownership information and evidence that I am authorized to pursue the transfer as identified in OAR 690-380-4010(5); OR
- ☒ I affirm the applicant is a municipality as defined in ORS 540.510(3)(b) and that the right is in the name of the municipality or a predecessor; OR
- ☐ I affirm the applicant is an entity with the authority to condemn property and is acquiring by condemnation the property to which the water right proposed for transfer is appurtenant and have supporting documentation.

Received

APR 29 2024

TACS

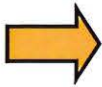
OWRD

14450

By my signature below, I confirm that I understand:

- Prior to Department approval of the transfer application, I may be required to submit payment to the Department for publication of a notice in a newspaper with general circulation in the area where the water right is located, once per week for two consecutive weeks. If more than one qualifying newspaper is available, I suggest publishing the notice in the following newspaper: Hillsboro News-Times.
- Amendments to the application may only be made in response to the Department's Draft Preliminary Determination (DPD). The applicant will have a period of at least 30 days to amend the application to address any issues identified by the Department in the DPD, or to withdraw the application. Note that amendments may be subject to additional fees, pursuant to ORS 536.050.
- Failure to complete an approved change in place of use and/or change in character of use, will result in loss of the water right (OAR 690-380-6010).
- Refunds may only be granted upon request and, as set forth in ORS 536.050(4)(a), if the Director determines that a refund of all or part of a fee is appropriate in the interests of fairness to the public or necessary to correct an error of the Department.

I (we) affirm that the information contained in this application is true and accurate.



[Signature]
Applicant Signature

Johnny Becker 4-18-24
Print Name (and Title if applicable) Date
City Manager

Is the applicant the sole owner of the land on which the water right, or portion thereof, proposed for transfer is located? ☐ Yes ☒ No*

**If NO, include signatures of all deeded landowners (and mailing and/or e-mail addresses if different than the applicant's) or attach affidavits of consent (Attachment 3) (and mailing and/or e-mail addresses) from all landowners or individuals/entities to which the water right(s) were conveyed.*

Check the following boxes that apply:

- ☒ The applicant is responsible for completion of change(s). Notices and correspondence should continue to be sent to the applicant.
- ☐ The receiving landowner will be responsible for completing the proposed change(s) after the final order is issued. Copies of notices and correspondence should be sent to this landowner.
- ☐ Both the receiving landowner and applicant will be responsible for completion of change(s). Copies of notices and correspondence should be sent to this landowner and the applicant.

At this time, are the lands in this transfer application in the process of being sold? ☒ Yes ☐ No

If YES, and you know who the new landowner will be, please complete the receiving landowner information table below. If you do not know who the new landowner will be, then a request for assignment will have to be filed for at a later date.

If a property sells, the certificated water right(s) located on the land belong to the new owner, unless a sale agreement or other document states otherwise.

RECEIVING LANDOWNER NAME			PHONE NO.	ADDITIONAL CONTACT NO.
ADDRESS				FAX NO.
CITY	STATE	ZIP	E-MAIL	
Describe any special ownership circumstances:				
The confirming Certificate shall be issued in the name of: ☐ Applicant ☐ Receiving Landowner				

Received

APR 29 2024

TACS

☐ Check here if any of the water rights proposed for transfer are or will be located within or served by an irrigation or other water district. (Tip: Complete and attach Supplemental Form D.)

IRRIGATION DISTRICT NAME _____	ADDRESS _____	
CITY _____	STATE _____	ZIP _____

☐ Check here if water for any of the rights supplied under a water service agreement or other contract for stored water with a federal agency or other entity.

ENTITY NAME _____	ADDRESS _____	
CITY _____	STATE _____	ZIP _____

To meet State Land Use Consistency Requirements, you must list all county, city, municipal corporation, or tribal governments within whose jurisdiction water will be diverted, conveyed or used.

ENTITY NAME City of Banks	ADDRESS 13680 NW Main Street	
CITY Banks	STATE OR	ZIP 97106

Description of Water Delivery System

System capacity: **Approximately 540 gallons per minute** (based on Banks' 2022 WSMP)

Describe the current water delivery system or the system that was in place at some time within the last five years. Include information on the pumps, canals, pipelines, and sprinklers used to divert, convey, and apply the water at the authorized place of use.

**The City's water system production capacity is estimated at about 540 gpm, though its conveyance system can accommodate much more than that. Well-2 is currently outfitted with a submersible pump and motor system capable of producing the full water right rate of 1.0 cfs (448 gpm) under the current water system configuration (pumping to the Carsten Reservoirs). Based on the City's historic MDD, maximum consumption rates likely exceed 600 gpm for short periods, though the City's distribution system has the capacity to convey an even higher rate. The additional wells proposed in this transfer will not increase the overall rate of production, but will instead distribute the current rate of production across the distribution system and allow the City to optimize overall annual production volume.*

Table 1. Location of Authorized and Proposed Point(s) of Diversion (POD) or Appropriation (POA)
(Note: If the POD/POA name is not specified on the certificate, assign it a name or number here.)

POD/POA Name or Number	Is this POD/POA Authorized or Proposed?	If POA, OWRD Well Log ID#	Twp	Rng	Sec	¼ ¼	Tax Lot, DLC, Gov't Lot	Measured Distances (from a recognized survey corner)
Well-2 (Behrman 2)	☒ Authorized ☐ Proposed	WASH-62373	2 N	3 W	31	NE NW	0402	120 ft S & 2,070 ft E of the NW Corner Sec 31
AN (Aerts Rd North)	☐ Authorized ☒ Proposed	PROPOSED	2 N	3 W	31	NE NE	0100	275 ft S & 475 ft W of the NE Corner Sec 31
AS (Aerts Rd South)	☐ Authorized ☒ Proposed	PROPOSED	2 N	3 W	31	NE SE	0100	2,500 ft N & 565 ft W of the SE Corner Sec 31
Park-A (Park Primary)	☐ Authorized ☒ Proposed	PROPOSED	2 N	3 W	31	NE SW	0600	2,120 ft N & 2,970 ft W of the SE Corner Sec 31
Park-B (Park Alternative)	☐ Authorized ☒ Proposed	PROPOSED	2 N	3 W	31	NW SE	0100	2,460 ft N & 2,520 ft W of the SE Corner Sec 31
Park-C (Park Alternative)	☐ Authorized ☒ Proposed	PROPOSED	2 N	3 W	31	NW SE	0400	2,630 ft N & 2,540 ft W of the SE Corner Sec 31
WTP (Water Treatment Plant)	☐ Authorized ☒ Proposed	PROPOSED	2 N	4 W	36	NE NE	0600	175 ft S & 335 ft W of the NW Corner Sec 31

Check all type(s) of change(s) proposed below (change "CODES" are provided in parentheses):

- | | |
|--|--|
| ☐ Place of Use (POU) | ☐ Supplemental Use to Primary Use (S to P) |
| ☐ Character of Use (USE) | ☐ Point of Appropriation/Well (POA) |
| ☐ Point of Diversion (POD) | ☒ Additional Point of Appropriation (APOA) |
| ☐ Additional Point of Diversion (APOD) | ☐ Substitution (SUB) |
| ☐ Surface Water POD to Ground Water POA (SW/GW) | ☐ Government Action POD (GOV) |

Received

APR 29 2024

Will all of the proposed changes affect the entire water right?

OWRD

☒ **Yes** Complete only the Proposed ("to" or "on" lands) section of Table 2 on the next page. Use the "CODES" listed above to describe the proposed changes.

☐ **No** Complete all of Table 2 to describe the portion of the water right to be changed.

Please use and attach additional pages of Table 2 as needed.
See page 6 for instructions.

Do you have questions about how to fill-out the tables?
Contact the Department at 503-986-0900 and ask for Transfer Staff.

Table 2. Description of Changes to Water Right Certificate # 95849

List the change proposed for the acreage in each ¼ ¼. If more than one change is proposed, specify the acreage associated with each change.
If there is more than one POD/POA involved in the proposed changes, specify the acreage associated with each POD/POA.

AUTHORIZED (the "from" or "off" lands) The listing that appears on the certificate BEFORE PROPOSED CHANGES List only that part or portion of the water right that will be changed.									Proposed Changes (see "CODES" from previous page)	PROPOSED (the "to" or "on" lands) The listing as it would appear AFTER PROPOSED CHANGES are made.								
Twp	Rng	Sec	¼ ¼	Tax Lot	Gvt Lot or DLC	Acre (if applicable)	POD(s) or POA(s) (name or number from Table 1)	Priority Date		Twp	Rng	Sec	¼ ¼	Tax Lot	Gvt Lot or DLC	Acre	POD(s) or POA(s) to be used (from Table 1)	Priority Date
									A P O A	The City of Banks Municipal Service Area						WELL-2	12/5/2002	
																AN		
																AS		
																PARK-A		
																PARK-B		
																PARK-C		
																WTP		
TOTAL ACRES								TOTAL ACRES								N/A		

Additional remarks: *The proposed changes effect the entire water right. The place of use for Certificate 95849 is the City's municipal service area.*

Received
APR 29 2024

For Place of Use or Character of Use Changes

Are there other water right certificates, water use permits or ground water registrations associated with the "from" or the "to" lands? ☐ Yes ☒ No

If YES, list the certificate, water use permit, or ground water registration numbers: N/A

Pursuant to ORS 540.510, any "layered" water use such as an irrigation right that is supplemental to a primary right proposed for transfer must be included in the transfer or be cancelled. Any change to a ground water registration must be filed separately in a ground water registration modification application.

~~For Substitution (ground water supplemental irrigation will be substituted for surface water primary irrigation)~~

~~Ground water supplemental Permit or Certificate # _____;~~

~~Surface water primary Certificate # _____;~~

Received

APR 29 2024

OWRD

For a change from Supplemental Irrigation Use to Primary Irrigation Use

~~Identify the primary certificate to be cancelled. Certificate # _____~~

For a change in point(s) of appropriation (well(s)) or additional point(s) of appropriation:

- ☒ Well log(s) are attached for each authorized and proposed well(s) that are clearly labeled and associated with the corresponding well(s) in Table 1 above and on the accompanying application map.

Well-2 Well Log Attached, see Attachment 6 – Basalt Aquifer Memo

AND/OR

- ☒ Describe the construction of the authorized and proposed well(s) in Table 3 for any wells that do not have a well log. For *proposed wells not yet constructed or built*, provide "a best estimate" for each requested information element in the table. The Department recommends you consult a licensed well driller, geologist, or certified water right examiner to assist with assembling the information necessary to complete Table 3.

Table 3. Construction of Point(s) of Appropriation

Any well(s) in this listing must be clearly tied to corresponding well(s) described in Table 1 and shown on the accompanying application map. Failure to provide the information will delay the processing of your transfer application until it is received. The information is necessary for the department to assess whether the proposed well(s) will access the same source aquifer as the authorized point(s) of appropriation (POA). The Department is prohibited by law from approving POA changes that do not access the same source aquifer.

Proposed or Authorized POA Name	Is well already built?	If an existing well, OWRD Well ID Tag No. L-_____	Total well depth	Casing Diam.	Casing Intervals (feet)	Seal depth(s)	Perforated or screened intervals	Static water level	Source aquifer	Well - specific rate (cfs or gpm).
WELL-2	YES	WASH-62373	665 ft	12"	0-300 ft	0-300 ft	Open-hole to 665 ft	34.4 ft bgs*	CRBG	1.0 CFS
AN	NO	-	650-750 ft	12"	Wells will be cased and sealed from the surface to approx. 200-250 ft (depending on conditions encountered in the field)		Open-hole to depth of ~650-750 ft	~30-50 ft	CRBG	1.0 CFS
AS	NO	-								
PARK-A	NO	-								
PARK-B	NO	-								
PARK-C	NO	-								
WTP	NO	-								

*Depth measurement collected on April 7, 2023.

*Well construction parameters are estimated based on Well-2's design. Some variability is expected between locations due to surface elevation, dip of basalt strata locally and regionally, and other subsurface conditions.

ATTACHMENT 2 Application for Water Right Transfer Evidence of Use Affidavit



Oregon Water Resources Department
725 Summer Street NE, Suite A
Salem, Oregon 97301-1266
(503) 986-0900
www.wrd.state.or.us

Please print legibly or type. Be as specific as possible. Attach additional pages if you need more spacing.
Supporting documentation must be attached.

State of Oregon)
) ss

County of WASHINGTON)

I, JOLYNN BECKER, in my capacity as CITY MANAGER OF THE CITY OF BANKS,

mailing address 13680 NW MAIN STREET, BANKS, OR 97106

telephone number (503) 324-6674, being first duly sworn depose and say:

1. My knowledge of the exercise or status of the water right is based on (check one):

☐ Personal observation ☒ Professional expertise

2. I attest that:

☒ Water was used during the previous five years on the **entire** place of use for
Certificates # 95849; OR

☐ My knowledge is specific to the use of water at the following locations within the last five years:

Certificate #	Township	Range	Mer	Sec	¼ ¼	Gov't Lot or DLC	Acres (if applicable)

OR

☒ Confirming Certificate # 95849 has been issued within the past five years (issued 8/6/2021); OR

☐ Part or all of the water right was leased instream at some time within the last five years. The
instream lease number is: _____ (Note: If the entire right proposed for
transfer was not leased, additional evidence of use is needed for the portion not leased instream.); OR

☐ The water right is not subject to forfeiture and documentation that a presumption of forfeiture for non-use
would be rebutted under ORS 540.610(2) is attached.

☐ Water has been used at the actual current point of diversion or appropriation for more than
10 years for Certificate # _____ (For Historic POD/POA Transfers)

(continues on reverse side)

Received
APR 29 2024 14450 -

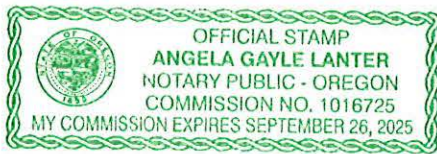
3. The water right was used for: (e.g., crops, pasture, etc.): _____

4. I understand that if I do not attach one or more of the documents shown in the table below to support the above statements, my application will be considered incomplete.

John Beck
Signature of Affiant

4-10-24
Date

Signed and sworn to (or affirmed) before me this 10th day of April, 2024.



Angela B Lanter
Notary Public for Oregon

My Commission Expires: September 26, 2025

Supporting Documents	Examples
☒ Copy of a water right certificate that has been issued within the last five years. (not a remaining right certificate)	Copy of confirming water right certificate that shows issue date
☐ Copies of receipts from sales of irrigated crops or for expenditures related to use of water	• Power usage records for pumps associated with irrigation use • Fertilizer or seed bills related to irrigated crops • Farmers Co-op sales receipt
☒ Records such as FSA crop reports, irrigation district records, NRCS farm management plan, or records of other water suppliers	• District assessment records for water delivered/produced • Crop reports submitted under a federal loan agreement • Beneficial use reports from district • IRS Farm Usage Deduction Report • Agricultural Stabilization Plan • CREP Report
☐ Aerial photos containing sufficient detail to establish location and date of photograph	Multiple photos can be submitted to resolve different areas of a water right. If the photograph does not print with a "date stamp" or without the source being identified, the date of the photograph and source should be added. Sources for aerial photos: OSU – www.oregonexplorer.info/imagery OWRD – www.wrd.state.or.us Google Earth – earth.google.com TerraServer – www.terraserver.com Received APR 29 2024 OWRD
☐ Approved Lease establishing beneficial use within the last 5 years	Copy of instream lease or lease number

STATE OF OREGON
COUNTY OF WASHINGTON
CERTIFICATE OF WATER RIGHT

THIS CERTIFICATE ISSUED TO

CITY OF BANKS
13680 NW MAIN ST
BANKS OR 97106

confirms the right to the use of water perfected under the terms of Permit G-16312. The amount of water used to which this right is entitled is limited to the amount used beneficially, and shall not exceed the amount specified, or its equivalent in the case of rotation, measured at the point of diversion from the source. The specific limits and conditions of the use are listed below.

APPLICATION FILE NUMBER: G-15887

SOURCE OF WATER: WELL 2 (WASH 62373) IN WEST FORK DAIRY CREEK BASIN

PURPOSE OR USE: MUNICIPAL USE

MAXIMUM RATE: 1.0 CUBIC FOOT PER SECOND

PERIOD OF USE: YEAR ROUND

DATE OF PRIORITY: DECEMBER 5, 2002

WELL LOCATION:

Twp	Rng	Mer	Sec	Q-Q	Measured Distances
2 N	3 W	WM	31	NE NW	WELL 2 (WASH 62373) - 120 FEET SOUTH AND 2070 FEET EAST FROM NW CORNER, SECTION 31

THE PLACE OF USE IS LOCATED AS FOLLOWS:

WITHIN THE SERVICE BOUNDARY OF THE CITY OF BANKS

Measurement, recording and reporting conditions:

- A. The water user shall maintain the totalizing flow meter or other suitable measuring device approved by the Director in good working order at each point of appropriation. The water user shall keep a complete record of the amount of water used each month, and shall submit an annual report which includes the recorded water use measurements to the Department by December 1 of each year. Further, the Director may require the water user to report general water-use information, including the place and nature of use of water under the right.

NOTICE OF RIGHT TO PETITION FOR RECONSIDERATION OR JUDICIAL REVIEW

This is an order in other than a contested case. This order is subject to judicial review under ORS 183.484 and ORS 536.075. Any petition for judicial review must be filed within the 60-day time period specified by ORS 183.484(2). Pursuant to ORS 183.484, ORS 536.075 and OAR 137-004-0080, you may petition for judicial review and petition the Director for reconsideration of this order. A petition for reconsideration may be granted or denied by the Director, and if no action is taken within 60 days following the date the petition was filed, the petition shall be deemed denied. In addition, under ORS 537.260 any person with an application, permit or water right certificate subsequent in priority may jointly or severally contest the issuance of the certificate within three months after issuance of the certificate.

- B. The water user shall allow the watermaster access to the meter or measuring device; provided however, where the meter or measuring device is located within a private structure, the watermaster shall request access upon reasonable notice.
- (1) Use of water from the well, as allowed herein, shall be controlled or shut off if the well displays:
- (a) An average water level decline of three or more feet per year for five consecutive years; or
 - (b) A total water level decline of fifteen or more feet; or
 - (c) A hydraulic interference decline of fifteen or more feet in any neighboring well providing water for senior exempt uses or wells covered by prior rights.
- (2) The water user shall be responsible for complying with each of the following requirements for measuring water levels in the well.
- (a) A water level measurement shall be made each year during the period March 1 through March 31.
 - (b) All water level measurements shall be made by a qualified individual. Qualified individuals are certified water rights examiners, registered geologists, registered professional engineers, licensed land surveyors, licensed water well constructor, licensed pump installer, or the water user/appropriator.
 - (c) Any qualified individual measuring a well shall use standard methods of procedure and equipment designed for the purpose of well measurement. The equipment used shall be well suited to the conditions of construction at the well. A list of standard methods of procedure and suitable equipment shall be available from the Department.
 - (d) The water user shall submit a record of the measurement to the Department on a form available from the Department. The record of measurement shall include both measurements and calculations, shall include a certification as to their accuracy signed by the individual making the measurements, and shall be submitted to the Department within 90 days from the date of measurement. The Department shall determine when any of the declines cited in section (1) are evidenced by the well measurement required in section (2).

Failure to comply with any of the provisions of this right may result in action including, but not limited to, restrictions on the use, civil penalties, or cancellation of the right.

If substantial interference with a senior water right occurs due to withdrawal of water from any well listed on this right, then use of water from the well(s) shall be discontinued or reduced and/or the schedule of withdrawal shall be regulated until or unless the Department approves or implements an alternative administrative action to mitigate the interference. The Department encourages junior and senior appropriators to jointly develop plans to mitigate interferences.

The well(s) shall be maintained in accordance with the General Standards for the Construction and Maintenance of Water Wells in Oregon. The works shall be equipped with a usable access port, and may also include an air line and pressure gauge adequate to determine the water level elevation in the well at all times.

Where two or more water users agree among themselves as to the manner of rotation in the use of water and such agreement is placed in writing and filed by such water users with the watermaster, and such rotation system does not infringe upon such prior rights of any water user not a party to such rotation plan, the watermaster shall distribute the water according to such agreement.

The Director may require water level or pump test results every ten years.

This right is for the beneficial use of water without waste. The water user is advised that new regulations may require the use of best practical technologies or conservation practices to achieve this end.

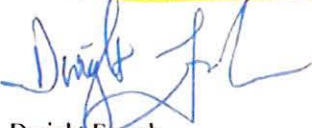
By law, the land use associated with this water use must be in compliance with statewide land-use goals and any local acknowledged land-use plan.

The use of water shall be limited when it interferes with any prior surface or ground water rights.

This right does not allow unauthorized inundation of property not under the ownership of the water user.

The right to the use of the water for the above purpose is restricted to beneficial use on the lands or place of use described; however, water may be applied to lands which are not specifically described above, provided the holder of this right complies with ORS 540.510(3).

Issued AUG 06 2021.



Dwight French
Water Right Services Division Administrator, for
Thomas M. Byler, Director
Oregon Water Resources Department

Received
APR 29 2024
OWRD

Water Use Report Based on Water Right



Cert:95849 OR *

CITY OF BANKS 13680 NW MAIN ST BANKS, OR 97106

Records per page: 10

[View All](#)

Water Year ⁶	Report ID	Facility	Acre-feet (AF) of Water Used												Total Water Used	Irrigated Acres
			Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep		
2023	62979	WELL 2 (WASH 62373/L-75346)	3.62	1.53	0.30	0.44	1.91	0.18	0.00	2.41	3.82	4.83	6.90	5.90	31.85	
2022	62979	WELL 2 (WASH 62373/L-75346)	1.12	1.99	0.56	1.72	0.70	0.32	3.76	0.70	5.40	9.16	6.64	1.07	33.14	
2021	62979	WELL 2 (WASH 62373/L-75346)	7.46	9.78	7.57	7.24	6.18	6.09	7.52	10.82	11.25	13.63	13.16	10.95	111.66	
2020	62979	WELL 2 (WASH 62373/L-75346)	5.71	5.29	6.03	6.27	6.87	7.02	5.70	7.62	12.01	17.62	20.33	12.86	113.33	
2019	62979	WELL 2 (WASH 62373/L-75346)	3.76	3.40	3.79	5.42	6.95	4.00	2.83	7.45	8.99	13.35	13.53	8.20	81.68	
2018	62979	WELL 2 (WASH 62373/L-75346)	2.67	4.55	2.95	1.00	2.85	4.07	4.05	10.99	7.75	6.26	8.72	5.34	61.19	
2017	62979	WELL 2 (WASH 62373/L-75346)	0.00	2.08	6.20	7.31	5.94	5.40	6.70	8.76	14.68	12.23	12.79	9.13	91.22	
2016	62979	WELL 2 (WASH 62373/L-75346)	10.97	10.66	6.45	3.67	2.20	1.13	0.50	3.43	6.06	8.79	8.44	3.73	66.02	
2015	62979	WELL 2 (WASH 62373/L-75346)	12.01	12.93	11.23	11.98	10.75	10.75	7.31	7.15	16.71	21.42	18.73	13.24	154.22	
2014	62979	WELL 2 (WASH 62373/L-75346)	13.66	15.17	16.51	13.82	12.93	14.01	11.21	14.95	16.86	21.77	22.53	17.70	191.11	

1/2

*The water year is named for the calendar year in which it ends. Example: the 2018 water year begins Oct. 1, 2017 and ends Sep. 30, 2018.

- The Water Resources Department makes reasonable efforts to screen the data for quality control; however, the Department cannot accept responsibility for errors, omissions, or accuracy of the information. Notification of any errors is appreciated. Send notifications to owrd.wateruserreporting@water.oregon.gov or call 971-345-7489.
- Water use is reported by point of diversion (POD), rather than by water right.
- If a POD is shared with multiple water rights, it is not feasible to separate out the amount used under the water right being queried from water used by other rights using this same POD.
- Monthly amounts indicate:
 - For diverted rights, the total amount diverted during the month;
 - For storage rights, the amount generally stored in the reservoir/pond during the month, as represented by the volume of water impounded on approximately the same day each month.
- Water use amounts have all been converted to "acre-feet" (AF), regardless of the original measurement unit reported. One AF is the volume of water that will cover an acre of ground one foot deep = 325,850 gallons.
- Zeroes indicate that a report was received stating that no water was used during those months; if a year is not listed, no report of water use was received for that year.

Received
APR 29 2024

OWRD

14450 -

ATTACHMENT 3
Application for
Water Right Transfer

Well-2



Oregon Water Resources Department
725 Summer Street NE, Suite A
Salem, Oregon 97301-1266
(503) 986-0900
www.wrd.state.or.us

Consent by Deeded Landowner

State of Oregon)
County of WASHINGTON)ss

I Doug Hixson in my/our capacity as Owner of the land containing three proposed POAs,

mailing address 12565 NW AERTS RD BANKS OR 97106,

telephone number 503-324-4444, duly sworn depose and say that I/We

consent to the proposed change(s) to Water Right Certificate Number Cert. 95849

described in a Water Right Transfer Application (T- Not yet assigned),
(transfer number, if known)

submitted by The City of Banks, Jolynn Becker, City Manager

on the property in tax lot number(s) 2N331D000100 (TL 0100),

Section 31 NWSE/NESE Township 2N North/South Range 3W East/West, W.M.

located at along Aerts Rd (AS-1) and in two locations in a proposed park area (Park-1B and Park-1C)
(site address)

Doug Hixson
Signature of Affiant

3/6/2024
Date

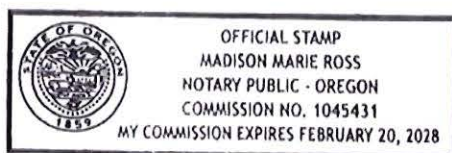
Signature of Affiant

Date

Subscribed and Sworn to before me this 6 day of March, 2024.

Madison Marie Ross
Notary Public for Oregon

My commission expires 2.20.28.



Application for Water Right Transfer



Oregon Water Resources Department
725 Summer Street NE, Suite A
Salem, Oregon 97301-1266
(503) 986-0900
www.wrd.state.or.us

Well-2

Consent by Deeded Landowner

State of Oregon)
County of WASHINGTON)ss

I DOUG HIXSON in my/our capacity as Owner of the land containing a proposed POAs,

mailing address 12565 NW AERTS RD BANKS OR 97106

telephone number 503-324-4444, duly sworn depose and say that I/We

consent to the proposed change(s) to Water Right Certificate Number Cert. 95849

described in a Water Right Transfer Application (T- Not yet assigned),
(transfer number, if known)

submitted by The City of Banks, Jolynn Becker, City Manager

on the property in tax lot number(s) 2N331CA06900 (TL 6900),

Section 31 NESW Township 2N North/South Range 3W East/West, W.M.

located at in a proposed park area (Park-1A)
(site address)

Doug Hixson
Signature of Affiant

3/6/2024
Date

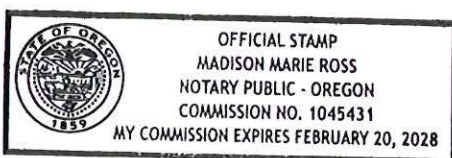
Signature of Affiant

Date

Subscribed and Sworn to before me this 6 day of March, 2024.

Madeline Marie Ross
Notary Public for Oregon

My commission expires 2-20-28.



Received

APR 29 2024

Application for Water Right Transfer



Oregon Water Resources Department
725 Summer Street NE, Suite A
Salem, Oregon 97301-1266
(503) 986-0900
www.wrd.state.or.us

Well-2

Consent by Deeded Landowner

State of Oregon)
County of WASHINGTON)ss

I DOUG HIXSON in my/our capacity as Owner of the land containing a proposed POA,

mailing address 12565 NW AERTS RD BANKS OR 97106,

telephone number 503-324-4444, duly sworn depose and say that I/We

consent to the proposed change(s) to Water Right Certificate Number Cert. 95849

described in a Water Right Transfer Application (T- Not yet assigned),
(transfer number, if known)

submitted by The City of Banks, Jolynn Becker, City Manager

on the property in tax lot number(s) 2N3310000100 (TL 0100),

Section 31 NENE Township 2N North/South Range 3W East/West, W.M.

located at near the intersection of Banks Rd and Aerts Rd (AN-2)
(site address)

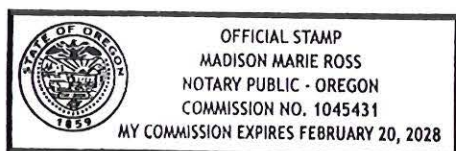
Doug Hixson
Signature of Affiant

3/6/2024
Date

Signature of Affiant

Date

Subscribed and Sworn to before me this 6 day of March, 2024.



Madison Marie Ross
Notary Public for Oregon

My commission expires 2.2.28.

Well-2

Application for Water Right Transfer



Oregon Water Resources Department
725 Summer Street NE, Suite A
Salem, Oregon 97301-1266
(503) 986-0900
www.wrd.state.or.us

Consent by Deeded Landowner

State of Oregon)
County of WASHINGTON)ss

I Robert S. Bobasky in my/our capacity as Owner of the land containing a proposed POA,
Manager, Wolverine Financial, LLC
mailing address 6770 SW Canyon Dr. Portland, OR, 97225

telephone number 503 292-8261, duly sworn depose and say that I/We

consent to the proposed change(s) to Water Right Certificate Number Cert. 95849

described in a Water Right Transfer Application (T- Not yet assigned),
(transfer number, if known)

submitted by The City of Banks, Jolynn Becker, City Manager

on the property in tax lot number(s) 2N43600 (TL 0600)

Section 36 NENE Township 2N North/South Range 4W East/West, W.M.

located at Southwest of the intersection of N Main Street and NW Cedar Canyon Road (WTP-2)
(site address)

Robert S. Bobasky
Signature of Affiant

January 9th, 2024
Date

Signature of Affiant

Date

Subscribed and Sworn to before me this 09 day of January, 2024.



I L Batiste
Notary Public for Oregon

My commission expires 11/21/2026.

Well-2

Application for Water Right Transfer



Oregon Water Resources Department
725 Summer Street NE, Suite A
Salem, Oregon 97301-1266
(503) 986-0900
www.wrd.state.or.us

Consent by Deeded Landowner

State of Oregon)
County of Washington)ss

I Martin Cropp in my/our capacity as Owner of the land containing a proposed POA,
mailing address 33687 NW Mountaineer Rd, North Plains, OR
telephone number 503-939-3507, duly sworn depose and say that I/We

consent to the proposed change(s) to Water Right Certificate Number Cert. 95849

described in a Water Right Transfer Application (T- Not yet assigned),
(transfer number, if known)

submitted by The City of Banks, Jolynn Becker, City Manager

on the property in tax lot number(s) 2N43600 (TL 0600)

Section 36 NENE Township 2N North/South Range 4W East/West, W.M.

located at Southwest of the intersection of N Main Street and NW Cedar Canyon Road (WTP-2)
(site address)

M Cropp
Signature of Affiant

3/5/2024
Date

Signature of Affiant

Date

Subscribed and Sworn to before me this 5th day of March, 2024.



Angela G. Lanter
Notary Public for Oregon

My commission expires September 26, 2025

Land Use Information Form



Oregon Water Resources Department
725 Summer Street NE, Suite A
Salem, Oregon 97301-1266
(503) 986-0900
www.oregon.gov/OWRD

Applicant(s): City of Banks (Jolynn Becker, City Manager)

Mailing Address: 13680 NW Main Street

City: Banks

State: OR

Zip Code: 97106

Daytime Phone: 503-324-5112

A. Land and Location

Please include the following information for all tax lots where water will be diverted (taken from its source), conveyed (transported), and/or used or developed. Applicants for municipal use, or irrigation uses within irrigation districts may substitute existing and proposed service-area boundaries for the tax-lot information requested below.

Township	Range	Section	¼ ¼	Tax Lot #	Plan Designation (e.g., Rural Residential/RR-5)	Water to be:	Proposed Land Use:
2N	3W	31	All		*	☐ Diverted ☒ Conveyed ☒ Used	
		31	NE NW	0402		☒ Diverted ☐ Conveyed ☐ Used	
		31	NE NE	0100		☒ Diverted ☐ Conveyed ☐ Used	
		31	NE SW	6900		☒ Diverted ☐ Conveyed ☐ Used	
		31	NW SE	0100		☒ Diverted ☐ Conveyed ☐ Used	
		31	NE SE	0100		☒ Diverted ☐ Conveyed ☐ Used	
		30	SW SW	*		☐ Diverted ☒ Conveyed ☒ Used	
		30	NW SW			☐ Diverted ☒ Conveyed ☒ Used	
		25	SE SE			☐ Diverted ☒ Conveyed ☒ Used	
	4W	36	E ¼	*		☐ Diverted ☒ Conveyed ☒ Used	
		36	NW SE			☐ Diverted ☒ Conveyed ☒ Used	
		36	SW SE			☐ Diverted ☒ Conveyed ☒ Used	
		36	NE NE			0600	☒ Diverted ☒ Conveyed ☒ Used

*City of Banks Urban Growth Boundary is the City's service area. Various taxlots and land use classifications within the UGB.

List all counties and cities where water is proposed to be diverted, conveyed, and/or used or developed:

City of Banks (All water production, conveyance, and usage occurs within the City of Banks Service Area as defined by the City's Urban Growth Boundary)

B. Description of Proposed Use

Type of application to be filed with the Water Resources Department:

- ☐ Permit to Use or Store Water
 ☒ Water Right Transfer
 ☐ Permit Amendment or Ground Water Registration Modification
☐ Limited Water Use License
 ☐ Allocation of Conserved Water
 ☐ Exchange of Water

Source of water: ☐ Reservoir/Pond ☒ Ground Water ☐ Surface Water (name) _____

Estimated quantity of water needed: 1.00 ☒ cubic feet per second ☐ gallons per minute ☐ acre-feet

Intended use of water: ☐ Irrigation ☐ Commercial ☐ Industrial ☐ Domestic for _____ household(s)
☒ Municipal ☐ Quasi-Municipal ☐ Instream ☐ Other _____

Briefly describe:

Transfer application to add additional POAs to support potential construction of new well(s) for one of the City's two groundwater supply rights.

Received

APR 29 2024

For Local Government Use Only

The following section must be completed by a planning official from each county and city listed unless the project will be located entirely within the city limits. In that case, only the city planning agency must complete this form. This deals only with the local land-use plan. Do not include approval for activities such as building or grading permits.

Please check the appropriate box below and provide the requested information

- ☒ Land uses to be served by the proposed water uses (including proposed construction) are allowed outright or are not regulated by your comprehensive plan. Cite applicable ordinance section(s):
- ☐ Land uses to be served by the proposed water uses (including proposed construction) involve discretionary land-use approvals as listed in the table below. (Please attach documentation of applicable land-use approvals which have already been obtained. Record of Action/land-use decision and accompanying findings are sufficient.) **If approvals have been obtained but all appeal periods have not ended, check "Being pursued."**

Type of Land-Use Approval Needed (e.g., plan amendments, rezones, conditional-use permits, etc.)	Cite Most Significant, Applicable Plan Policies & Ordinance Section References	Land-Use Approval:	
		☐ Obtained ☐ Denied	☐ Being Pursued ☐ Not Being Pursued
	Received	☐ Obtained ☐ Denied	☐ Being Pursued ☐ Not Being Pursued
	APR 29 2024	☐ Obtained ☐ Denied	☐ Being Pursued ☐ Not Being Pursued
	OWRD	☐ Obtained ☐ Denied	☐ Being Pursued ☐ Not Being Pursued
		☐ Obtained ☐ Denied	☐ Being Pursued ☐ Not Being Pursued

Local governments are invited to express special land-use concerns or make recommendations to the Water Resources Department regarding this proposed use of water below, or on a separate sheet.

Name: Deann Becker Title: City Manager
 Signature: [Signature] Phone: 503-324-5118 Date: 4-9-24
 Government Entity: City of Banks

Note to local government representative: Please complete this form or sign the receipt below and return it to the applicant. If you sign the receipt, you will have 30 days from the Water Resources Department's notice date to return the completed Land Use Information Form or WRD may presume the land use associated with the proposed use of water is compatible with local comprehensive plans.

Receipt for Request for Land Use Information

Applicant name: _____
 City or County: _____ Staff contact: _____
 Signature: _____ Phone: _____ Date: _____

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

JUN 02 2005

WELL I.D. # L 75346

START CARD # 173577

Instructions for completing this report are on the last page of this report
WATER RESOURCES DEPT
SALEM, OREGON

(1) LAND OWNER

Well Number _____

Name City of BanksAddress 100 South Main StreetCity Banks State Or Zip 97106

(2) TYPE OF WORK

☒ New Well☐ Deepening ☐ Alteration (repair/recondition) ☐ Abandonment ☐ Conversion

(3) DRILL METHOD

☒ Rotary Air ☒ Rotary Mud ☐ Cable ☐ Auger ☐ Cable Mud☐ Other _____

(4) PROPOSED USE

☐ Domestic ☒ Community ☐ Industrial ☐ Irrigation☐ Thermal ☐ Injection ☐ Livestock ☐ Other _____

(5) BORE HOLE CONSTRUCTION

Special Construction: ☐ Yes ☒ NoDepth of Completed Well 665 ft.Explosives used: ☐ Yes ☒ No Type _____ Amount _____

BORE HOLE			SEAL			Sacks or Pounds
Diameter	From	To	Material	From	To	
16	0	300	Cem/Bent	0	300	115 sks
12	300	665				

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

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	+2	300	.250	☒	☐	☒	☐
Liner:					☐	☐	☐	☐

Drive Shoe used ☐ Inside ☐ Outside ☒ None

Final location of shoe(s) _____

(7) PERFORATIONS/SCREENS

☐ Perforations Method _____☐ Screens Type _____ Material _____

From	To	Slot Size	Number	Diameter	Tele/pipe size	Casing	Liner
						☐	☐
						☐	☐
						☐	☐
						☐	☐

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

☐ Pump ☐ Bailer ☒ Air ☐ Flowing Artesian

Yield gal/min	Drawdown	Drill stem at	Time
650+		660	1hr.
275-280		200	1hr.

Temperature of water 57°F Depth Artesian Flow Found _____Was a water analysis done? ☒ Yes By whom A.M.J.Did any strata contain water not suitable for intended use? ☐ Too little☐ Salty ☐ Muddy ☐ Odor ☐ Colored ☐ Other _____

Depth of strata: _____

(9) LOCATION OF WELL (legal description)

County WashingtonTax Lot 402

Lot _____

Township 2N N or S Range 3W E or W WMSection 31 NE 1/4 NW 1/4

Lat _____ " or _____ (degrees or decimal)

Long _____ " or _____ (degrees or decimal)

Street Address of Well (or nearest address)

42000 NW Banks Rd. Banks, Or

(10) STATIC WATER LEVEL

48 ft. below land surface. Date 5-25-05

_____ ft. below land surface. Date _____

Artesian pressure _____ lb. per square inch Date _____

(11) WATER BEARING ZONES

Depth at which water was first found 378

From	To	Estimated Flow Rate	SWL
378	468	350 gpm	48
615	660	300 gpm	48

(12) WELL LOG

Ground Elevation _____

Material	From	To	SWL
Brn & red-brn cly			
sticky, firm.	0	69	
Red-brn basalt, very			
weathered.	69	102	
Green clay soft	102	121	
Gry-brn clay firm	121	155	
Red-brn basalt very			
weathered.	155	179	
Brn basalt, weathered	179	201	
Gry-brn basalt	201	206	
Gry/gry-blk basalt thrd	206	231	
Gry-brn basalt w/			
interbeds.	231	251	
Gry-gry blk basalt hr	251	313	
Brn basalt interbed	313	325	

Date Started 3-22-05 Completed 5-25-05

(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.

WWC Number 573 Date 5-31-2005

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.

WWC Number 1266 Date May 31, 2005

Signed _____

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

RECLWASH 62373

JUN 02 2005

WELL I.D. # L 75346

START CARD # 173577

WATER RESOURCES DEPT
SALEM, OREGON

Instructions for completing this report are on the last page.

(1) LAND OWNER

Well Number _____
Name City of Banks Conti. Page 2
Address 100 South Main Street
City Banks State OR Zip 97106

(2) TYPE OF WORK

☒ New Well
☐ Deepening ☐ Alteration (repair/recondition) ☐ Abandonment ☐ Conversion

(3) DRILL METHOD

☒ Rotary Air ☒ Rotary Mud ☐ Cable ☐ Auger ☐ Cable Mud
☐ Other _____

(4) PROPOSED USE

☐ Domestic ☒ Community ☐ Industrial ☐ Irrigation
☐ Thermal ☐ Injection ☐ Livestock ☐ Other _____

(5) BORE HOLE CONSTRUCTION

Special Construction: ☐ Yes ☒ No
Depth of Completed Well 665 ft.
Explosives used: ☐ Yes ☒ No Type _____ Amount _____

BORE HOLE			SEAL			Sacks or Pounds
Diameter	From	To	Material	From	To	

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

☐ Other _____

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:					☐	☐	☐	☐
					☐	☐	☐	☐
					☐	☐	☐	☐
Liner:					☐	☐	☐	☐
					☐	☐	☐	☐
					☐	☐	☐	☐

Drive Shoe used ☐ Inside ☐ Outside ☐ None

Final location of shoe(s) _____

(7) PERFORATIONS/SCREENS

☐ Perforations Method _____
☐ Screens Type _____ Material _____

From	To	Slot Size	Number	Diameter	Tele/pipe size	Casing	Liner
						☐	☐
						☐	☐
						☐	☐
						☐	☐

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

☐ Pump ☐ Bailer ☐ Air ☐ Flowing Artesian

Yield gal/min _____ Drawdown _____ Drill stem at _____ Time _____

Temperature of water _____ 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 (legal description)

County Washington
Tax Lot 402 Lot _____
Township 2N N or S Range 3W E or W WM
Section 31 NE 1/4 NW 1/4
Lat _____ " or _____ (degrees or decimal)
Long _____ " or _____ (degrees or decimal)

Street Address of Well (or nearest address)

42000 NW Banks Rd., Banks, OR

(10) STATIC WATER LEVEL

48 ft. below land surface. Date 05/25/2005

_____ ft. below land surface. Date _____

Artesian pressure _____ lb. per square inch Date _____

(11) WATER BEARING ZONES

Depth at which water was first found _____

From	To	Estimated Flow Rate	SWL

(12) WELL LOG

Material	From	To	SWL
Blk basalt, frags, occ soapstone.	325	378	
Bm/gry-brn basalt frag broken occ red-brn basalt/lava streaks	378	420	48
Blk/gry blk basalt/lava	420	468	
Blk/gry blk basalt, hard occ frags.	468	615	
Blk basalt interbed, occ claystone occ lava streaks.	615	660	48
Blk/gry-blk basalt, frags.	660	665	

Date Started 3-22-2005 Completed 5-25-2005

(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.

WWC Number 577 Date 5-31-2005

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.

WWC Number 1266 Date May 31, 2005

Signed _____

ORIGINAL - WATER RESOURCES DEPARTMENT

FIRST COPY - CONSTRUCTOR

SECOND COPY - CUSTOMER

06/16/2004

14450 -



April 17, 2024

1501011

Oregon Water Resources Department
Attn: *Groundwater Hydrogeology Section*
725 Summer St. NE Ste A
Salem, Oregon 97301

c/o: Dennis Orlowski, *Northeast Region Lead Hydrogeologist*

RE: INTERPRETATION OF BASALT WATER-BEARING ZONES IN THE AREA OF BANKS, OREGON

CwM-H2O (CwM) presents this technical memorandum to the Oregon Water Resources Department (OWRD) on behalf of the City of Banks (City). The purpose of the Technical Memorandum is twofold: 1) to present the results of additional investigations into the nature of two water-bearing zones (WBZs) within the Columbia River Basalt Group (CRBG), and 2) to support an application to modify Certificate 95849 that requests the additional points of appropriation and proposes the development of all basalt WBZs encountered to a depth of 665 feet below ground surface (bgs) as one aquifer unit. The WBZs investigated are documented in the City's primary production well, Well 2 (WASH 6237) and in the nearby Quail Valley Irrigation Well (QV Well, WASH 50693). The locations of each well are presented in Figure 1 - Vicinity Map.

This technical memorandum also presents a correction to the 2018 Banks-Green Mountain Aquifer Storage and Recovery Feasibility Study (ASR Feasibility Study) which incorrectly interpreted a downhole video observation to suggest water was moving within the borehole of Well 2. This interpretation is incorrect based on a reevaluation of the original video log and the new evidence presented in sections that follow which demonstrate that the WBZs encountered in Well 2 were in equilibrium and that no flow was evident in the video log.

Recent Geophysical Evidence

The investigation of Well 2 was conducted in 2017 as part of the Banks-Green Mountain Aquifer Storage and Recovery Feasibility Study (CwM, 2018). The investigation of the QV Well was completed in two separate investigations. The first was conducted by CwM to assess the condition of the QV Well as a potential asset for the City (CwM, 2020). A separate assessment was conducted by Holt Development and Summit Water Resources, LLC (Summit) in 2023, which focused on the potential flow between water bearing units in the QV Well. Both investigations utilized Pacific Survey, LLC of Auburn, CA for geophysical survey. The array of downhole methods used to evaluate both production wells included the following:

- Video Survey with down- and side-casting camera
- Caliper Log
- Dynamic Spinner Log
- Static Spinner Log
- Temperature Log

Received

APR 29 2024

OWRD

All information gathered in these assessments is available for OWRD to review. However, for the purposes of this technical memorandum, the pertinent evidence of potential flow within the basalt borehole is found in the static spinner log data collected in each well. The raw data for static spinner log for each of these investigations is provided here for OWRD technical review in the attached Exhibit A - Geophysical Log Surveys with the original State of Oregon Water Well Reports (well logs) from each well.

Exhibit A also contains an excerpt from a report provided by Summit where Pacific Survey provides commentary on the 2017 Banks Well 2 and the 2023 QV Well spinner log results. Pacific Survey's analysis of the spinner logs states that zero flow is detected between the two WBZs. This indicates that, in both wells, the two WBZs are of equal head value and in combination act as a single aquifer without loss of water or artesian head from one zone to the other.

Evidence from Area Water Well Reports of Equivalent Static Water Levels

The observations of equivalent head values between upper and lower WBZs in Well 2 and the QV Well are also supported in the original well logs which document no change in static water level as the borehole was advanced through each WBZ during the time of drilling. This observation is not uncommon in the northern Tualatin Valley in the area of the City. In a limited search, CwM identified eight other deep (greater than 400 ft bgs) basalt wells in the area that tap a number of WBZs and show no change in static water levels as the wells were constructed. These wells include WASH 7691, WASH 13531, WASH 54161, WASH 55819, WASH 71480, WASH 72830, WASH 141, and WASH 0002 with deepening log WASH 199. The well locations are shown in Figure 1. The well logs for each are included in Exhibit B - Area Basalt Wells. The lack of a change in static water level suggests that the WBZs are interconnected, in equilibrium between WBZs, and that these basalt water WBZs act as one aquifer in the area of the City.

Evidence from Recent Water Level Elevations: Wells 1 and 2

Previous water levels reported to CwM from the City and to OWRD in annual report as "SCADA" reading are incorrect due to a long-term failure in the transducers measuring water levels in the City's Well 1 and Well 2. The City has recently completed an elevational survey of both wellheads and begun reconditioning and repairs for the pump and motor equipment in Well-1. This reconditioning included the replacement of the older non-functional transducer system. Concurrently, the City has also replaced the previous transducer system that was installed in Well-2.

Since March 2023, Well-1 has been offline as the equipment has been removed for repair or replacement. This allowed for direct access to Well 1 water levels by hand measurement with a well sounder. CwM geologists have collected three water levels during this time period when Well 2 has been idle for at least 7-days. The static water elevations (calculated with survey elevations and manual depth measurements) between the wells differed by 0.62 – 1.12 feet, Table 1.

Under static winter-spring conditions, groundwater elevations were less than 1 ft apart. Some variability in water level is expected due to the irrigation season and the use of multiple area wells for residential use. However, little variation has been observed. In summary, the static water

elevations are essentially equivalent, and the very small differences measured between the wells would not be sufficient to move groundwater between WBZs or cause a loss of water from one zone to the other.

Table 1 – Manual Groundwater Elevation Measurements

Date	Well-1 Groundwater Elevation	Well-2 Groundwater Elevation	Difference in Elevation	Time Since Well-2 Pumped
3/15/2023	197.60 ft	196.98 ft	0.62 ft	7+ days
4/7/2023	199.17 ft	198.05 ft	1.12 ft	7+ days
10/13/2023	185.85 ft	184.89 ft	0.96 ft	7+ days

2023 Review of Video Survey of Well-2 completed in 2018

A video survey of Well-2 was conducted by Pacific Surveys LLC and CwM on January 12, 2018. The video covered the entire length of Well 2 including the cased and open-hole intervals. A CwM Principal-level review of the video was completed by Robert E. Long Jr. *RG, CWRE* in October of 2023 to assess the origin of comments made in the 2018 ASR Feasibility Study regarding the exchange of water between the upper and lower WBZs within Well 2. The quote “the exchange of water between the two water bearing zones was observed, with water from the water from the lower water bearing zone moving upwards and mixing with the upper water bearing zone” is found on page 11 of the ASR Feasibility Study and in Appendix C page 1.

In the review of the video survey, documented suspended sediment and debris dislodged from the inside of the well was observed floating downward in the water column, including when the camera was not in motion. The video survey from top of casing to the bottom of the well (0 to 669.7 bgs) at no time indicates evidence of upward flow. It is CwM’s conclusion that the survey interpretation error occurred as the video camera was retracted from the well. Specifically, it is believed that upward movement of sediment upon the retraction of the camera was interpreted as upward flow. In reality, this effect is the result of suction created behind the camera when it is being pulled back up the well.

CwM’s intent with this memo is to correct this statement about upward water flow and exchange between WBZ in Well 2. There is no evidence from the video survey of water movement in either direction. The evidence provided by the downhole video suggests that the two WBZs share very similar hydraulic pressure regimes under static conditions.

Summary

The goal of this memo is to update the factual evidence related to two water bearing zones (WBZ) within the Columbia River Basalt Group (CRBG) that supply groundwater water to production wells in and around Banks, Oregon in the northern Tualatin Valley in support of a proposed application to add five additional points of appropriation to Certificate 95849. The application proposes to use both WBZs as a single aquifer for both production and for future ASR operations. It is the professional opinion of CwM, based on the evidence presented in geophysical analysis, well log static water levels,

and current static water levels measured by CwM at Well 1 and Well 2, that these basalt WBZ are in equilibrium and operate as a single aquifer unit. Previous observations in the 2018 ASR Feasibility Study and interpretations of flow within the borehole based on a downhole video data are incorrect and are amended herein based on the reevaluation of the 2018 video in question.

Please let us know if there are any issues with processing this application or questions regarding the information included therein. Thank you for your assistance.

Sincerely,

CwM H2O, L.L.C.



Robert Long, CWRE

CC Jolynn Becker, City Manager, City of Banks
Joe Schiewe, Holt Homes
Paul Sellke, AKS Engineering & Forestry

Received

APR 29 2024

OWRD

14450 -

Pacific Surveys, LLC

A full service geophysical well logging company

Jason Melady
Summit Water Resources, LLC

November 9, 2022

RE: Technical Memo: Static Spinner

Under non-pumping condition the spinner/flowmeter is lowered into the boring/well at a constant speed. The revolutions of the impeller are recorded as counts/sec. Once the spinner/flowmeter reaches total depth, the survey is stopped and a new survey begins with the tool ascending the boring/well. The spinner/flowmeter is raised to the surface at a constant rate and the revolutions of the impeller are recorded.

Both the down and up runs are merged onto one graph and scaled so that both spinner response overlay one another in a zone of known zero-flow. This zone is typically above all perforations. In the case of Well #2, this would be in the 12-inch casing that is set to 300ft. This zone of zero-flow demonstrates that the revolutions of the spinner is directly a result of the speed of descent/ascent of the tool.

If both the down and up run overlay one another throughout the entire boring/well, the inference would be that there is no vertical flow anywhere in the boring/well. If vertical flow was occurring, the down and up runs would diverge from one another in response to the direction of the flow (velocities are additive). In the case for Well #2, there is no significant divergence between the down and up runs, indicating zero-flow through the entire interval.

Best Regards,
Michael Ridder

Pacific Surveys, LLC

Received

APR 29 2024

OWRD

PACIFIC SURVEYS

STATIC SPINNER UP & DOWN RUNS NON-PUMPING CONDITION

Job No.
23530

Company CITY OF BANKS

Well WELL 2

File No.

Field BANKS

County WASHINGTON

State OR

Location:

41700 NW BANKS RD.
GPS: 45.6214 -123.1066

Other Services:

VIDEO CALIPER
DYNAMIC SPINNER
STOP COUNTS
SPINNER ANALYSIS

Sec.	Twp.	Rge.	Elevation above perm. datum	Elevation K.B. D.F. G.L.
Permanent Datum	T.O.C.			
Log Measured From	T.O.C.			
Drilling Measured From	N/A			

Date	01-12-2018		
Run Number	ONE		
Depth Driller	669'		
Depth Logger	669'		
Bottom Logged Interval	660'		
Top Log Interval	225'		
Pump Set @	196' (BOTTOM)		
Time Pumping Prior to Survey	30 MIN		
Pumping Water Level	NOT MEASURED		
Max. Recorded Temp.	N/A		
Pump Rate (GPM)	N/A		
Time Well Ready	0800		
Time Logger on Bottom	1200		
Equipment Number	PS-7		
Location	SAC		
Recorded By	SCHUMACHER		
Witnessed By	R. DOUGHERTY		

Perforation Record				Perforation Record			
Type	Slot Size	From	To	Type	Slot Size	From	To

Casing Record	Size	Wgt/Ft	Top	Bottom
Surface String	12"	N/A	0'	300'
Camera Tube				
Production String				
Liner				

14450 -

<<< Fold Here >>>

All interpretations are opinions based on inferences from electrical or other measurements and Pacific Surveys cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, damages, or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees. These interpretations are also subject to Pacific Surveys' general terms and conditions set out in our current Price Schedule.

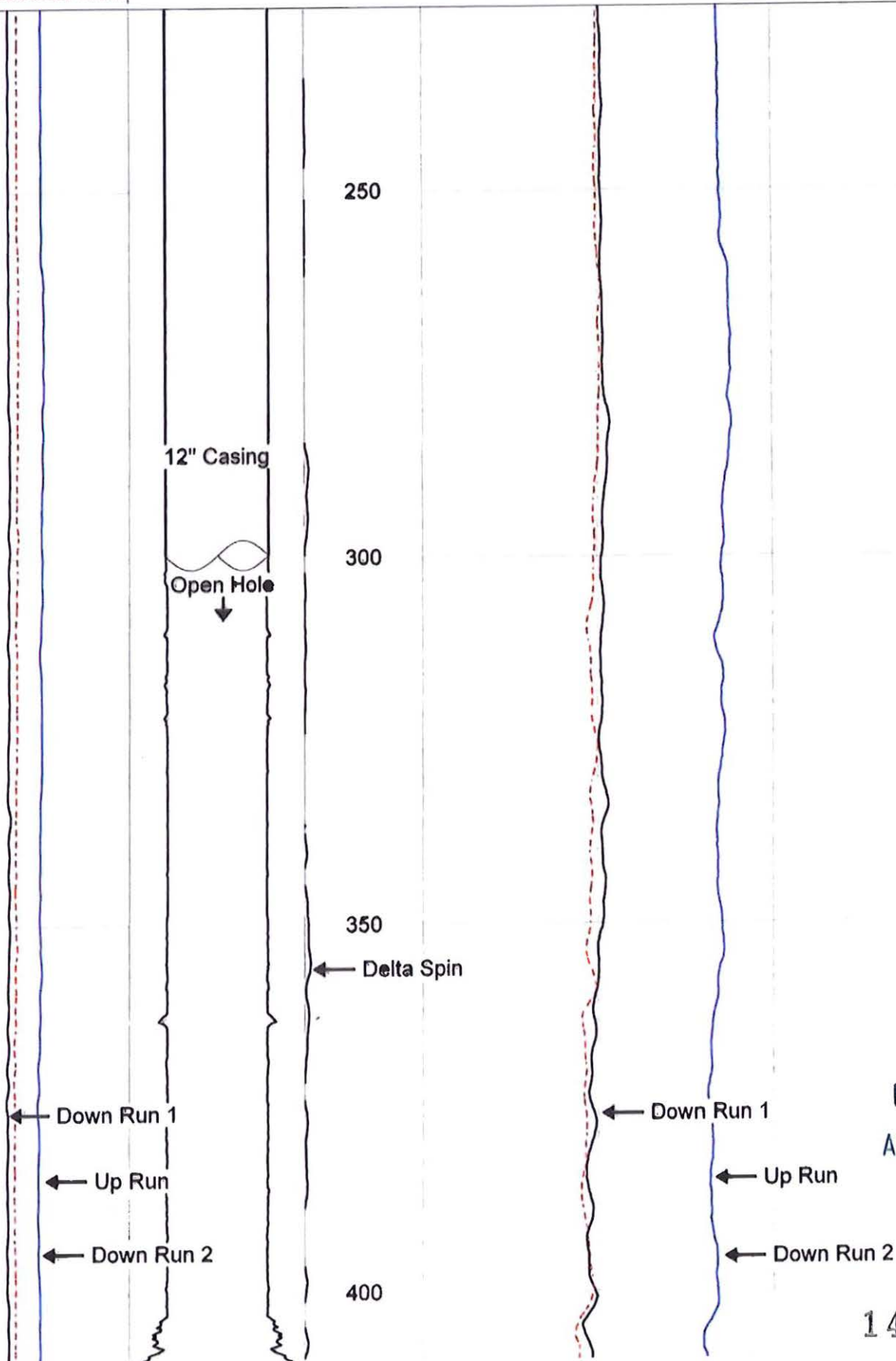
Comments

FULL BORE
12" OPEN HOLE BELOW 300'

Database File 23530.db
Dataset Pathname statD1
Presentation Format spinner
Dataset Creation Fri Jan 12 10:11:44 2018
Charted by Ninth in East scaled 1:240

0	(ft/min) 100
LS	
0	(ft/min) 100
LS	
0	(ft/min) -100

0	Spinner Down Run (cps)	40
1.5	Spinner Up Run (cps)	41.5



Received
APR 29 2024
OWRD

14450 -

450

500

550

600

Received

APR 29 2024

OWRD

14450 -

650

FIII

LS	Delta Spin	0	Spinner Down Run (cps)	40
0 (ft/min) 100		0	Spinner Down Run (cps)	40
LS		1.5	Spinner Up Run (cps)	41.5
0 (ft/min) 100				
LS				
0 (ft/min) -100				

Received
APR 29 2024

OWRD

14450 -

WATER WELL REPORT

WATER RESOURCES DEPARTMENT
SALEM, OREGON 97310
within 30 days from the date
of well completion.

RECEIVED

STATE OF OREGON
(Please type or print)

SEP - 6 1977 (Do not write above this line)

State Well No. 2N/3W-31
State Permit No. _____

(1) OWNER: WATER RESOURCES DEPT.

Name City of Banks SALEM, OREGON
Address Banks, Oregon

(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 ☐

(5) CASING INSTALLED:

Threaded ☐ Welded ☒
8-5/8" Diam. from plus 2 ft. to 210 ft. Gage 250
" Diam. from ft. to ft. Gage
" Diam. from ft. to ft. Gage

(6) PERFORATIONS:

Perforated? ☐ Yes ☒ No.

Type of perforator used

Size of perforations in. by Received
perforations from ft. to 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? AMJannsen

Yield: 275 gal./min. with 224 ft. drawdown after 48 hrs.
150 " 146 " " "

Ball test gal./min. with ft. drawdown after hrs.

Artesian flow g.p.m.

Temperature of water 58° Depth artesian flow encountered _____ ft.

(9) CONSTRUCTION:

Well seal—Material used Cement grout & 2% gel

Well sealed from land surface to 210 ft.

Diameter of well bore to bottom of seal 12-1/4" in.

Diameter of well bore below seal 8" in.

Number of sacks of cement used in well seal 25 sacks

How was cement grout placed? Placed on o.d. of casing

3 through grout pipe - 20 sacks run @ 210',
5 sacks run to top off at ground level upon
completion

Was a drive shoe used? ☐ Yes ☒ No Plugs _____ Size: location _____ ft.

Did any strata contain unusable water? ☒ Yes ☐ No

Type of water? insufficient depth of strata 130' to 160'

Method of sealing strata off cased and cemented

Was well gravel packed? ☐ Yes ☒ No Size of gravel: _____

Gravel placed from _____ ft. to _____ ft.

(10) LOCATION OF WELL:

County Washington Driller's well number _____
1/4 1/4 Section 81 T. 2 N. R. 8 W. W.M.

Bearing and distance from section or subdivision corner

(11) WATER LEVEL: Completed well.

Depth at which water was first found 130 ft.

Static level 84 ft. below land surface. Date 8/24/77

Artesian pressure _____ lbs. per square inch. Date _____

(12) WELL LOG:

Diameter of well below casing 8"

Depth drilled 450 ft. Depth of completed well 450 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
Dark brown clay topsoil	0	8	
Silty brown clay	8	15	
Red-brown clay w/rotten rock fragments	15	50	
Sticky red clay-occ. rotten rock streaks	50	95	
Brown clay & rotten rock	95	110	
Dark brown & gray-brown clay --organic material	110	120	
Soft blue-gray cemented gravel	120	130	
Rotten brown basalt	130	160	20 gpm
Soft brown basalt-occ. weathered	160	195	
Black-brown basalt	195	215	
Hard gray-black basalt	215	230	
Broken brown basalt w/soapstone and lava interbeds	230	245	10 gpm
Fractured black basalt--occ. orevice	245	265	
Hard gray-black basalt, occ-			

Work started 8/16/77 10 Completed 8/24/77 19

Date well drilling machine moved off of well 8/24/77 19

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] AMJannsen Date 8/29/77 19

(Drilling Machine Operator)
Drilling Machine Operator's License No. 523

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 A. M. Jannsen Drilling Co.
(Person, firm or corporation) (Type or print)

Address 21075 SW Tualatin Valley Hwy., Aloha, Oreg

[Signed] Edward M. Jannsen
(Water Well Contractor)

Contractor's License No. 79 Date 8/29/77 19

(1) OWNER:

Name City of Banks SALEM, OREGON
Address Page 2

(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 ☐

(5) CASING INSTALLED:

Threaded ☐ Welded ☐
" Diam. from ft. to ft. Gage
" Diam. from ft. to ft. Gage
" Diam. from ft. to ft. Gage

(6) PERFORATIONS:

Perforated? ☐ Yes ☐ No.

Type of perforator used

Size of perforations in. by in.
perforations from ft. to 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.
" " " " " "

Ballor test gal./min. with ft. drawdown after hrs.

Artesian flow g.p.m.

Temperature of water Depth artesian flow encountered ft.

(9) CONSTRUCTION:

Well seal—Material used
Well sealed from land surface to ft.
Diameter of well bore to bottom of seal in.
Diameter of well bore below seal in.
Number of sacks of cement used in well seal sacks
How was cement grout placed?

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 Driller's well number
1/4 1/4 Section T. R. W.M.
Bearing and distance from section or subdivision corner

(11) WATER LEVEL: Completed well.

Depth at which water was first found ft.
Static level ft. below land surface. Date
Artesian pressure lbs. per square inch. Date

(12) WELL LOG:

Diameter of well below casing

Depth drilled ft. Depth of completed well 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
fracture	265	315	5 gpm
Brown basalt-occ. broken	315	825	10 gpm
Hard black & gray-black basalt-occ. crevice	325	860	
Black basalt--occ. broken w/ green soapstone	860	880	25 gpm
Broken black & brown basalt-w/ lava & soapstone interbed	880	400	200 gpm
Broken gray-brown basalt w/ lava streaks	400	415	100gpm
Hard gray-black basalt--occ. crevice	415	450	
Received			
APR 29 2024			
OWRD			

Work started 19 Completed 19

Date well drilling machine moved off of well 19

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] Date 19
(Drilling Machine Operator)

Drilling Machine Operator's License No.

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 (Person, firm or corporation) (Type or print)

Address

[Signed] (Water Well Contractor)

Contractor's License No. Date 19

Pacific Surveys, LLC

A full service geophysical well logging company

Ryan Dougherty
Summit Water Resources, LLC

December 14, 2022

RE: Static Spinner

On November 30th, 2022, we performed a static spinner survey on the Quail Valley Golf Course Well in Banks, OR. Only one down and up run were required for this survey, as both the down and up run overlaid one another throughout the entire cased and open-hole portions of the well, with no significant divergence. This corresponds with the Temperature Log performed on this well from November 2020, which, similarly, revealed no significant divergence from the expected geothermal gradient. Therefore, it appears that there is no vertical flow in the boring/well.

Best Regards,
Mike Schumacher

Pacific Surveys, LLC

Received
APR 29 2024
OWRD

PACIFIC SURVEYS

STATIC SPINNER UP & DOWN RUNS NON-PUMPING CONDITION

Job No.

30460

Company SUMMIT WATER RESOURCES, LLC

Well QVGC WELL

Field BANKS

County WASHINGTON State OR

Location:

12565 NW AERTS RD
GPS: 45.6167 -123.0958

Other Services:

CALIPER

Sec.	Twp.	Rge.	Elevation	Elevation
Permanent Datum	G.L.		Elevation	
Log Measured From	G.L.		above perm. datum	K.B.
Drilling Measured From	N/A			D.F.
				G.L.
Date	11-30-2022			
Run Number	ONE			
Depth Driller	640'			
Depth Logger	641'			
Bottom Logged Interval	620'			
Top Log Interval	0'			
Static Water Level	~25'			
Depth Of Pump Bowls	N/A			
Density / Viscosity	N/A			
Max. Recorded Temp.	N/A			
Pump Rate (GPM)	N/A			
Time Well Ready	0900			
Time Logger on Bottom	0945			
Equipment Number	PS-8			
Location	SAC			
Recorded By	SCHUMACHER			
Witnessed By	R. DOUGHERTY			

Borehole Record				Tubing Record			
Run Number	Bit	From	To	Size	Weight	From	To
Casing Record				Size	Wgt/Ft	Top	Bottom
Surface String							
Prot. String							
Production String	10.25" ID			0.25" WALL			
Liner							

<<< Fold Here >>>

All interpretations are opinions based on inferences from electrical or other measurements and Pacific Surveys cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, damages, or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees. These interpretations are also subject to Pacific Surveys' general terms and conditions set out in our current Price Schedule.

Comments

OPEN HOLE FROM 315.1 FT TO APPROX. 645 FT.

Database File 30460.db
Dataset Pathname spn_d4
Presentation Format spinnerg
Dataset Creation Wed Nov 30 11:05:14 2022
Charted by Ninth in Feet scaled 1:240

0 (ft/min) -100
LS
0 (ft/min) 100

Image

Delta Spin -1.2

Spinner Up Run (cps)

48.8

10" Surface Casing

200

250

300

350

← Spinner Up Run

← Spinner Down Run

Spinner Down Run →

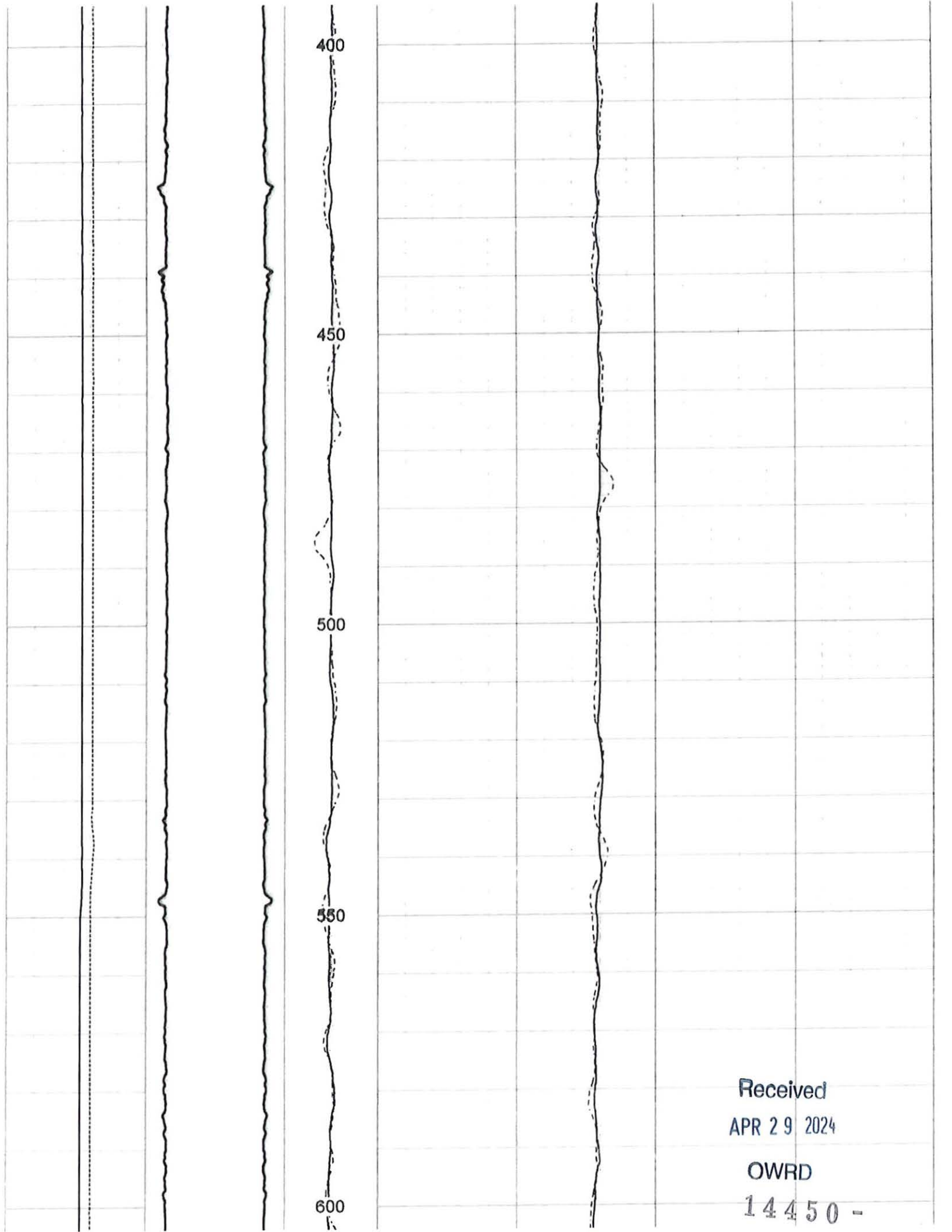
← Delta Spin

← Spinner Up Run

Received
APR 29 2024

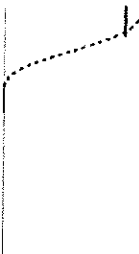
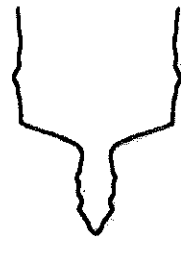
OWRD

14450 -



Received
APR 29 2024

OWRD
14450 -

						
LS 0 (ft/min) -100	Borehole Caliper Image	Delta Spin	0	Spinner Down Run (cps)		50
LS 0 (ft/min) 100		Delta Spin	-1.2	Spinner Up Run (cps)		48.8

14450 -

Received
APR 29 2024
OWRD

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

RECEIVED

CITY WELL-2

WELL I.D. # L 75346

JUN 02 2005

START CARD # 173577

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

(1) LAND OWNER

Name City of Banks
Address 100 South Main Street
City Banks State Or Zip 97106

(2) TYPE OF WORK

☒ New Well
☐ Deepening ☐ Alteration (repair/recondition) ☐ Abandonment ☐ Conversion

(3) DRILL METHOD

☒ Rotary Air ☒ Rotary Mud ☐ Cable ☐ Auger ☐ Cable Mud
☐ Other

(4) PROPOSED USE

☐ Domestic ☒ Community ☐ Industrial ☐ Irrigation
☐ Thermal ☐ Injection ☐ Livestock ☐ Other

(5) BORE HOLE CONSTRUCTION Special Construction: ☐ Yes ☒ No

Depth of Completed Well 665 ft.
Explosives used: ☐ Yes ☒ No Type _____ Amount _____

BORE HOLE			SEAL			Sacks or Pounds
Diameter	From	To	Material	From	To	
16	0	300	Cem/Bent	0	300	115 sks
12	300	665				

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

Backfill placed from _____ ft. to _____ ft. Material _____
Gravel placed from _____ ft. to _____ ft. Size of gravel _____

(6) CASING/LINER

Casing:	Diameter	From	To	Gauge	Steel	Plastic	Welded	Threaded
	12	+2	300	.250	☒	☐	☒	☐
Liner:					☐	☐	☐	☐

Drive Shoe used ☐ Inside ☐ Outside ☒ None

Final location of shoe(s) _____

(7) PERFORATIONS/SCREENS

☐ Perforations Method _____
☐ Screens Type _____ Material _____

From	To	Slot Size	Number	Diameter	Tele/pipe size	Casing	Liner
						☐	☐
						☐	☐
						☐	☐
						☐	☐

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

Yield gal/min	Drawdown	Drill stem at	Time
650+		660	1hr.
275-280		200	1hr.

Temperature of water 57°F Depth Artesian Flow Found _____

Was a water analysis done? ☒ Yes By whom A.M.J.

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

☐ Salty ☐ Muddy ☐ Odor ☐ Colored ☐ Other _____

Depth of strata: _____

(9) LOCATION OF WELL (legal description)

County Washington
Tax Lot 402 Lot _____
Township 2N N or S Range 3W E or W WM
Section 31 NE 1/4 NW 1/4
Lat _____ " or _____ (degrees or decimal)
Long _____ " or _____ (degrees or decimal)

Street Address of Well (or nearest address) _____
42000 NW Banks Rd. Banks, Or

(10) STATIC WATER LEVEL

48 ft. below land surface. Date 5-25-05
_____ ft. below land surface. Date _____
Artesian pressure _____ lb. per square inch Date _____

(11) WATER BEARING ZONES

From	To	Estimated Flow Rate	SWL
378	468	350 gpm	48
615	660	300 gpm	48

(12) WELL LOG

Material	From	To	SWL
Brn & red-brn cly			
sticky, firm.	0	69	
Red-brn basalt, very			
weathered.	69	102	
Green clay soft	102	121	
Gry-brn clay firm	121	155	
Red-brn basalt very			
weathered.	155	179	
Brn basalt, weathered	179	201	
Gry-brn basalt	201	206	
Gry/gry-blk basalt hrd	206	231	
Gry-brn basalt w/			
interbeds.	231	251	
Gry-gry blk basalt hrd	251	313	
Brn basalt interbed	313	325	

Date Started 3-22-05 Completed 5-25-05

(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.

WWC Number 573 Date 5-31-2005

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.

WWC Number 1266 Date May 31, 2005

Signed _____

STATE OF OREGON
WATER SUPPLY WELL REPORT

(as required by ORS 537.765)

MAY 28 1996

QV WELL

(START CARD) # 86703

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

SALEM OREGON

(1) OWNER: Well Number _____
Name QUAIL VALLEY GOLF COURSE
Address 12565 NW AERTS RD.
City BANKS State OR Zip 97106

(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 640 ft.
Explosives used ☐ Yes ☒ No Type _____ Amount _____

HOLE SEAL
Diameter From To Material From To Sacks or pounds
14-3/4 0 312 Cement 0 90 35 SKS
10 312 640 Cement 280 312 20 SKS

How was seal placed: Method ☐ A ☒ B ☒ C ☐ D ☐ E
☐ Other _____
Backfill placed from 90 ft. to 280 ft. Material Hivisc Gel & Bent. chips
Gravel placed from _____ ft. to _____ ft. Size of gravel _____

(6) CASING/LINER:
Diameter From To Gauge Steel Plastic Welded Threaded
Casing: 10" +1 312 250 ☒ ☐ ☒ ☐
Liner: _____ ☐ ☐ ☐ ☐ ☐ ☐ ☐

Final location of shoe(s) OWRD

(7) PERFORATIONS/SCREENS:
☐ Perforations Method _____
☐ Screens Type _____ Material _____
From To Slot Number Diameter Tele/plpe Casing Liner
size size size
10" 10" 10" 10" 10" 10" 10" 10"

(9) LOCATION OF WELL by legal description:
County WASHINGTON Latitude _____ Longitude _____
Township 2N N or S Range 3W E or W. WM.
Section 31 NW 1/4 SE 1/4
Tax Lo 00100 Lot _____ Block _____ Subdivision _____
Street Address of Well (or nearest address) 12565 NW AERTS RD
BANKS, OR

(10) STATIC WATER LEVEL:
18 ft. below land surface. Date 05/20/96
Artesian pressure _____ lb. per square inch. Date _____

(11) WATER BEARING ZONES:
Depth at which water was first found 340

From	To	Estimated Flow Rate	SWL
340	465	100 GPM	18
515	575	100 "	18
575	630	100+GPM	18

(12) WELL LOG:
Ground Elevation _____

Material	From	To	SWL
Topsoil	0	1	
Dark brown clay	1	4	
Sticky brown clay	4	16	
Sticky gray-brown clay	16	94	
Sticky red-brown clay	94	156	
Decomp. brown basalt, occ. clay interbeds	156	283	
Soft brown basalt	283	298	
Firm gray-brown basalt	298	310	
Hard gray basalt	310	340	
Gray-brown, gray-black basalt	340	465	18
occ. brown basalt streaks			"
(caving zone 420-435, grouted solid)			
Brown basalt & ash, cemented debris	465	515	
Gray-brown basalt, frac. occ. broken green mineral stain	515	575	18
Brown & gray-brown basalt, brown	575	630	18
Gray-black basalt, hard, frac.	630	640	

Date started 04/02/96 Completed 05/20/96

(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 1266 & 573
Signed _____ Date 05/22/96

(8) WELL TESTS: Minimum testing time is 1 hour
☐ Pump ☐ Bailor ☒ Air ☐ Flowing
Yield gal/min Drawdown Drill stem at Time
300+ _____ 280 1 hr.
200 _____ 180 "
180 _____ 100 "

Temperature of water 56 F Depth Artesian Flow Found _____
Was a water analysis done? ☒ Yes By whom AMT
Did any strata contain water not suitable for intended use? ☐ Too little
☐ Salty ☐ Muddy ☐ Odor ☐ Colored ☐ Other _____
Depth of strata: _____

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

14450 -

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

JUN 02 2005

WELL I.D. # L 75346

START CARD # 173577

WATER RESOURCES DEPT

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

(1) LAND OWNER Well Number
Name City of Banks Conti. Page 2
Address 100 South Main Street
City Banks State OR Zip 97106

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

(3) DRILL METHOD
☒ Rotary Air ☒ Rotary Mud ☐ Cable ☐ Auger ☐ Cable Mud
☐ Other

(4) PROPOSED USE
☐ Domestic ☒ Community ☐ Industrial ☐ Irrigation
☐ Thermal ☐ Injection ☐ Livestock ☐ Other

(5) BORE HOLE CONSTRUCTION Special Construction: ☐ Yes ☒ No
Depth of Completed Well 665 ft.
Explosives used: ☐ Yes ☒ No Type Amount

BORE HOLE			SEAL			Sacks or Pounds
Diameter	From	To	Material	From	To	

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

Backfill placed from ft. to ft. Material
Gravel placed from ft. to ft. Size of gravel

Casing:	Diameter		From	To	Gauge	Steel	Plastic	Welded	Threaded
						☐	☐	☐	☐
						☐	☐	☐	☐
						☐	☐	☐	☐
						☐	☐	☐	☐
						☐	☐	☐	☐
						☐	☐	☐	☐
						☐	☐	☐	☐
						☐	☐	☐	☐

Drive Shoe used ☐ Inside ☐ Outside ☐ None
Final location of shoe(s)

(7) PERFORATIONS/SCREENS
☐ Perforations Method
☐ Screens Type Material

From	To	Slot Size	Number	Diameter	Tele/pipe size	Casing	Liner
						☐	☐
						☐	☐
						☐	☐
						☐	☐
						☐	☐
						☐	☐
						☐	☐
						☐	☐
						☐	☐

(8) WELL TESTS: Minimum testing time is 1 hour
☐ Pump ☐ Bailer ☐ Air ☐ Flowing Artesian

Yield gal/min	Drawdown	Drill stem at	Time

Temperature of water 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 (legal description)
County Washington
Tax Lot 402 Lot
Township 2N N or S Range 3W E or W WM
Section 31 NE 1/4 NW 1/4
Lat ° ' " or (degrees or decimal)
Long ° ' " or (degrees or decimal)

Street Address of Well (or nearest address)
42000 NW Banks Rd., Banks, OR

(10) STATIC WATER LEVEL
48 ft. below land surface. Date 05/25/2005
ft. below land surface. Date
Artesian pressure lb. per square inch Date

(11) WATER BEARING ZONES

Depth at which water was first found		Estimated Flow Rate	SWL
From	To		

(12) WELL LOG

Material	Ground Elevation		SWL
	From	To	
Blk basalt, frags, occ soapstone.	325	378	
Brn/gry-brn basalt frag broken occ red-brn basalt/lava streaks	378	420	48
Blk/gry blk basalt/lava	420	468	
Blk/gry blk basalt, hard occ frags.	468	615	
Blk basalt interbed, occ claystone occ lava streaks.	615	660	48
Blk/gry-blk basalt, frags.	660	665	

Date Started 3-22-2005 Completed 5-25-2005

(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.

WWC Number 577 Date 5-31-2005

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.

WWC Number 1266 Date May 31, 2005

Signed

STATE OF OREGON
WATER WELL REPORT
(as required by ORS 537.705)

RECEIVED

SEP 29 1989

(START CARD) #

13022

pg. 1

(1) OWNER:

Name Pumpkin Ridge Development, Inc.
Address One Southwest Columbia, Suite 1010
City Portland State OR Zip 97258

Well Number:

WATER

(9) LOCATION OF WELL by legal description:

County Washington Latitude _____ Longitude _____
Township 2 N Nor S, Range 3 W E or W, WM.
Section 36 SE 1/4 SW 1/4
Tax Lot _____ Lot _____ Block _____ Subdivision _____
Street Address of Well (or nearest address) _____

(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 583 ft.
Explosives used ☐ Yes ☒ No ☐ Type _____ Amount _____

HOLE			SEAL			Amount sacks or pounds
Diameter	From	To	Material	From	To	
17 1/2	0	65	Cement	0	65	50 sacks
17 1/2	65	200	Drill gel	65	200	
17 1/2	200	224	Cement	200	224	25 sacks
14-3/4	224	232	Cement	224	232	" "

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

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"	+2	232	.250	☒	☐	☒	☐
				☐	☐	☐	☐
				☐	☐	☐	☐
				☐	☐	☐	☐
Liner:				☐	☐	☐	☐
				☐	☐	☐	☐

Final location of shoe(s) _____

(7) PERFORATIONS/SCREENS:

☐ Perforations Method _____
☐ Screens Type _____ Material _____

From	To	Slot size	Number	Diameter	Tele/pipe size	Casing	Liner
						☐	☐
						☐	☐
						☐	☐
						☐	☐
						☐	☐
						☐	☐

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

Yield gal/min	Drawdown	Drill stem at	Time
☒ Pump ☐ Bailer ☐ Air ☐ Flowing ☐ Artesian			
280	103..		24 xhr.
350	148		30 hr.
400	195		48 hr.

Temperature of water _____ 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: _____

(10) STATIC WATER LEVEL:

40 ft. below land surface. Date 9/21/89
Artesian pressure _____ lb. per square inch. Date _____

(11) WATER BEARING ZONES:

Depth at which water was first found		245	
From	To	Estimated Flow Rate	BWL
245	253	20 gpm	40
335	350	10 gpm	"
380	403	70 gpm	"
413	417	15 gpm	"

(12) WELL LOG:

Material	From	To	SWL
Topsoil	0	1	
Firm brown clay	1	4	
Soft brown silty clay	4	23	
Sticky light gray-brown clay	23	47	
Sticky red-brown clay	47	79	
Sticky light gray clay	79	97	
Sticky red-brown clay	97	136	
Sticky red clay	136	151	
Decomposed brown basalt	151	156	
Firm decomp. gray-brown basalt	156	160	
Interbedded red, brown & gray clay	160	170	
Soft decomposed brown basalt	170	191	
Firm decomposed brown basalt	191	218	
Firm gray-brown basalt	218	220	
Hard gray basalt	220	253	
Firm gray-black basalt	253	261	
Soft black basalt	261	268	
Firm gray-black basalt	268	289	
Hard gray basalt	289	299	
Firm gray basalt	299	305	
Soft gray-black basalt	305	312	
Firm gray basalt	312	316	

Date started 8/10/89 Completed 9/25/89

(unbonded) Water Well Constructor Certification:

I certify that the work I performed on the construction, alteration, 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.

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. I 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.

WWC Number 1266
Signed [Signature] Date 9/27/89

STATE OF OREGON
WATER WELL REPORT
(as required by ORS 687.765)

RECEIVED Ridge Development
SEP 29 1989
(START CARD) # 13022 pg 2

(1) OWNER:

Name _____
Address _____
City _____ State _____ Zip _____

Well Number: WATER RESOURCES LOCATION OF WELL by legal description:
SALEM, OREGON

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

HOLE			SEAL			Amount sacks or pounds
Diameter	From	To	Material	From	To	
12"	232	552				
10"	552	583				

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

☐ Other _____

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:					☐	☐	☐	☐
					☐	☐	☐	☐
					☐	☐	☐	☐
					☐	☐	☐	☐
Liner:					☐	☐	☐	☐
					☐	☐	☐	☐

Final location of shoe(s) _____

(7) PERFORATIONS/SCREENS:

☐ Perforations Method _____
☐ Screens Type _____ Material _____

From	To	Slot size	Number	Diameter	Tele/pipe size	Casing	Liner
						☐	☐
						☐	☐
						☐	☐
						☐	☐
						☐	☐
						☐	☐

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

☐ Pump ☐ Bailer ☐ Air ☐ Flowing Artesian

Yield gal/min Drawdown Drill stem at Time

1 hr.

Temperature of water _____ 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: _____

(10) STATIC WATER LEVEL:

_____ ft. below land surface. Date _____
Artesian pressure _____ lb. per square inch. Date _____

(11) WATER BEARING ZONES:

Depth at which water was first found		Estimated Flow Rate		SWL
From	To			
434	443	20	gpm	41
453	458	30	"	"
458	519	85	"	"
559	575	150	"	"

(12) WELL LOG:

Material	From	To	SWL
Hard gray basalt	316	335	
Soft reddish-black basalt w/ green claystone (335-337)	335	350	
Hard gray basalt	350	403	
Firm gray-black basalt	403	417	
Hard gray basalt	417	430	
Soft gray-black basalt	430	443	
Firm gray-black basalt	443	447	
Soft gray-black basalt	447	453	
Hard gray basalt	453	458	
Soft gray-black basalt w/clay- stone	458	504	
Soft gray-green Claystone	504	508	
Firm gray-black basalt	508	519	
Wood	519	523	
Soft gray-green claystone	523	528	
Gray basalt w/gray claystone interbeds	528	533	
Hard gray basalt	533	559	
Firm gray-black basalt, occ. broken streak	559	583	

Date started _____ Completed _____

(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.

WWC Number _____
Signed _____ Date _____

(bonded) Water Well Constructor Certification:

I accept responsibility for the construction, alteration, or abandonment of work performed on this well during the construction dates reported above. I 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.

WWC Number _____
Signed _____ Date _____

Geologic Log for Site WASH 7691

NWIS Site ID: 453650123000301

OWRD Log ID: WASH 7691

Well location: 02N/03W-36CAA

Depth drilled, in feet below land surface: 583

Land surface altitude, in feet above Nation Geodetic Vertical Datum of 1929: 220

Logged by: T. L. Tolan and M. H. Beeson

Date drilled: 08/10/1989

Depth	Symbol	Lithologic Description	Elevation	Water Bearing Zones	Geochem Sample	Remarks
0		Wanapum Basalt, Frenchman Springs Member Basalt of Sand Hollow deeply weathered (laterite)	218			Top of CRBG at ground surface; very deeply weathered 0 to 218 ft. No samples from 0 to 235 ft. Unit contacts interpreted from drillers log.
100		deeply weathered (laterite) Basalt of Ginkgo?	121			
		Vantage Interbed claystone	58 48			160 ft: Vantage Interbed estimated to be approx. 10 ft. thick.
200		Grande Ronde Basalt, Sentinel Bluffs Member flow 1 (-1) weathered flow top deeply weathered interior dense interior - columnar	27 0			Sentinel Bluffs Member flow 1 (-1): aphyric flow 2: sparsely plagioclase phyrlic with small phenocrysts
		normal flow top dense interior - columnar, flow lobe	-32 -42	20gpm	245	
		normal flow top dense interior - columnar	-57			
300		Interbed - claystone	-83		300	305 ft: Interbed <2 ft. thick.
		Grande Ronde Basalt, Winter Water Member flow 1 normal flow top dense interior - columnar Interbed - claystone	-97 -117		320	335 ft: Interbed <2 ft. thick.
		normal flow top dense interior - entablature dense interior - columnar	-137 -167	10gpm 70gpm	390	Winter Water Member flows 1 & 2: plagioclase phyrlic with small glomerocrysts
400		flow top dense interior	-167 -197 -202	15gpm	420	Note: Winter Water flows 2 and 3 may be flow lobes of a single flow.
		normal flow top dense interior - entablature pillow complex with massive claystone rip-ups	-212		480 500	flow lobe: plagioclase phyrlic with small glomerocrysts flow 3: plagioclase phyrlic with small glomerocrysts
		Interbed - siltstone with wood	-302			520 ft: Interbed approx. 10 ft. thick.
		Grande Ronde Basalt, Ortley Member normal flow top dense interior - entablature	-312 -322		565 575	Ortley Member: aphyric
600		TD 583 ft	-583			

Received
APR 29 2024
OWRD

14450 -

STATE OF OREGON
WATER WELL REPORT
(as required by ORS 537.705)

RECEIVED JUN 10 1987 013531 24/3W-21dd

(1) OWNER:

Name Harry Lazott
Address Rt 20 Box
City Banks State OR Zip 97106

(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 500 ft.
Explosives used ☐ Yes ☒ No ☐ Type _____ Amount _____

HOLE			SEAL			Amount sacks or pounds
Diameter	From	To	Material	From	To	
6"	0	100	Cement	0	100	28 sacks
	100	500				

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

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	+1	180	1/4	☒	☐	☒	☐
					☐	☐	☐	☐
					☐	☐	☐	☐
					☐	☐	☐	☐
Liner:	4	10	500	1/2	☒	☐	☐	☐
					☐	☐	☐	☐

Final location of shoe(s) Drill shoe 180 ft

PERFORATIONS/SCREENS:

☐ Perforations Method Drill
☐ Screens Type _____ Material _____

From	To	Slot size	Number	Diameter	Tele/pipe size	Casing	Liner
400	490	1/2	160			☐	☒
						☐	☐
						☐	☐
						☐	☐

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

☐ Pump ☐ Bailor ☒ Air ☐ Flowing ☐ Artesian

Yield gal/min	Drawdown	Drill stem at	Time
50		480	1 hr.
40		420	1/2
15		360	1/2

Temperature of water 55 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 Wash Latitude _____ Longitude _____
Township 2N Nor S, Range 3W E or W, WM.
Section 21 SE 1/4 SE 1/4
Tax Lot _____ Lot _____ Block _____ Subdivision _____
Street Address of Well (or nearest address) Hahn rd.

(10) STATIC WATER LEVEL:

257 ft. below land surface. Date 5-19-87
Artesian pressure _____ lb. per square inch. Date _____

(11) WATER BEARING ZONES:

Depth at which water was first found		Estimated Flow Rate	SWL
From	To		
300	320	6	250
440	490	50	250

(12) WELL LOG:

Ground elevation _____

Material	From	To	SWL
Brown soil	0	2	
Red clay	2	40	
Tan clay	40	90	
Brown clay	90	140	
Brown clay - Broken rock	140	300	
Black Gravel - W.B.	300	320	250
Brown clay - Jay's rock	320	440	
Black Gravel W.B.	440	490	250
Brown clay	490	500	250

Received

APR 29 2024

OWRD

Date started 5-18-87 Completed 5-19-87

(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 Joseph Trussell WWC Number 711
Date 5-21-87

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

RECEIVED

NOV 27 1998

WELL I.D. # L. 27709
 START CARD # 118198

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

WATER RESOURCES DEPT.
 SALEM, OREGON

(1) OWNER: Well Number _____
 Name BILL & RHONDA OWEN
 Address 4850 NW KAHNEETA CRT.
 City PORTLAND State OR Zip 97229

(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 465 ft.
 Explosives used ☐ Yes ☒ No Type _____ Amount _____

HOLE			SEAL			Sacks or pounds
Diameter	From	To	Material	From	To	
6	210	465	SEAL NOT	DISTURBED		

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

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:				☐	☐	☐	☐
				☐	☐	☐	☐
				☐	☐	☐	☐
Liner:	4 1/2	0	455	200#	☒	☒	☐
					☐	☐	☐

Final location of shoe(s) 4 1/2 x 6 K-Packer @ 355 (SEE NOTE)

(7) PERFORATIONS/SCREENS:

From	To	Slot size	Number	Diameter	Material	Casing	Liner
435	455	1/8x12	80		PVC 200	☐	☒
						☐	☐
						☐	☐
						☐	☐

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

Yield gal/min	Drawdown	Drill stem at	Flowing Time
100+		350 to T.D.	1 hr.
60		180	"
18-20		100	"

Temperature of water 53°F Depth Artesian Flow Found _____
 Was a water analysis done? ☒ Yes By whom AMT
 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 WASHINGTON Latitude _____ Longitude _____
 Township 2N N or S Range 3W E or W. WM.
 Section 36 NW 1/4 NW 1/4
 Tax Lot 103 Lot _____ Block _____ Subdivision _____
 Street Address of Well (or nearest address) 13990 NW OLD PUMPKIN RIDGE RD., CORNELIUS, OR

(10) STATIC WATER LEVEL:
62 ft. below land surface. Date 11/18/98
 Artesian pressure _____ lb. per square inch. Date _____

(11) WATER BEARING ZONES:
 Depth at which water was first found 2/210

From	To	Estimated Flow Rate	SWL
	210	6 GPM	62
210	435	4 GPM	"
435	465	90+GPM	62

(12) WELL LOG:
 Ground Elevation _____

Material	From	To	SWL
Existing 6" steel cased well	0	210	62
open hole			
Red minerals sludge & rock fragments	200	210	
Gray-black basalt, occ. blk lava	210	257	
Multi-colored claystone, ash, spongia coleamic debris	257	270	
Black basalt & lava, occ. broken, creviced	270	390	
Gray-black basalt, occ. lava streaks	390	438	
Black lava, very broken, occ. gray-black basalt	438	455	
Black & red basalt & lava	455	465	62

NOTE: Liner hung on packer @ 355', wedged on bell.

Date started 11/12/98 Completed 11/18/98
 (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 573
 Signed _____ Date 11/20/98

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

WATER RESOURCES DEPT.
SALEM, OREGON

WELL I.D. # L 38991
START CARD # 129593

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

(1) OWNER:

Name CROPP FARMS
Address 31345 NW NORTH AVE.
City NORTH PLAINS State OR Zip 97133

(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 420 ft.
Explosives used ☐ Yes ☒ No Type _____ Amount _____

HOLE			SEAL			Sacks or pounds
Diameter	From	To	Material	From	To	
10	0	281	Cement	0	45	17 sks
			Drill gel	45	250	
8	281	363	Cement	250	363	28 sks
6	363	420				

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

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"	+1	363	250	☒	☐	☒	☐
				☐	☐	☐	☐
				☐	☐	☐	☐
				☐	☐	☐	☐
Liner:				☐	☐	☐	☐
				☐	☐	☐	☐
				☐	☐	☐	☐

Final location of shoe(s)

(7) PERFORATIONS/SCREENS:

From		To	Slot size	Number	Diameter	Material	Case	Liner
							☐	☐
							☐	☐
							☐	☐
							☐	☐
							☐	☐
							☐	☐
							☐	☐
							☐	☐

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

☐ Pump	☐ Bailor	☒ Air	Flowing
Yield gal/min	Drawdown	Drill stem at	Artesian
45		400	1 hr.
36		250	"
21		150	"

Temperature of water 56°F Depth Artesian Flow Found _____

Was a water analysis done? ☒ Yes By whom AMY

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

☐ Salty ☒ Muddy ☐ Odor ☒ Colored ☐ Other

Depth of strata: 231-278' (SEALED OFF)

(9) LOCATION OF WELL by legal description:

County WASHINGTON Latitude _____ Longitude _____
Township 2N N or S Range 3W E or W. WM.
Section 35 SE 1/4 NW 1/4
Tax Lot 500 Lot _____ Block _____ Subdivision _____
Street Address of Well (or nearest address) 34051 NW MTN DALE RD

(10) STATIC WATER LEVEL:

38 ft. below land surface. Date 03/30/2000
Artesian pressure _____ lb. per square inch. Date _____

(11) WATER BEARING ZONES:

Depth at which water was first found 383

From	To	Estimated Flow Rate	SWL
383	388	21 GPM	38
391	405	24 GPM	38

(12) WELL LOG:

Ground Elevation _____

Material	From	To	SWL
Topsoil	0	1	
Brown clay	1	17	
Gray clay	17	24	
Sticky brown clay	24	102	
Sticky gray clay	102	130	
Fine to coarse black sand	130	141	
Sticky gray clay	141	178	
Fine gray sand w/wood	178	190	
Soft dark gray clay	190	231	
Fine to med. black gravel	231	243	wh
Fine to med. brown gravel	243	247	wh
Fine to med. black gravel	247	278	wh
Sticky gray clay	278	318	
Firm gray-brown basalt	318	329	
Soft brown basalt	329	350	
Firm gray-brown basalt	350	391	38
Soft dk. gray-brown basalt	391	405	38
Firm gray-brown basalt	405	412	
Hard gray basalt	412	420	

Date started 03/06/2000 Completed 03/30/2000

(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 1266

Signed [Signature] Date 03/31/2000

STATE OF OREGON
WATER SUPPLY WELL REPORT

(ORS 537.765 & OAR 690-205-0210)

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

WASH 71480

WELL LABEL # L 107489

START CARD # 207761

ORIGINAL LOG #

(1) LANDOWNER

Owner Well I.D.

First Name Brady & Darci Last Name Wilson

Company

Address 1815 NW 143rd Ave B 28

City Portland State OR Zip 97229

(2) TYPE OF WORK

☒ New ☐ Conversion ☐ Deepening

☐ Alteration (complete Sections 2a & 10) ☐ Abandonment (complete Section 5a)

(2a) PRE-ALTERATION:

Well Depth ft.

Seal Material

Casing Type: ☐ Steel ☐ Plastic ☐ Other

Casing Gauge Casing Diameter

(3) DRILL METHOD

☐ Rotary Air ☐ Rotary Mud ☐ Auger

☒ Cable ☐ Cable Mud ☐ Reverse Rotary ☐ Other

(4) PROPOSED USE

☒ Domestic ☐ Irrigation ☐ Community

☐ Industrial/Commercial ☐ Livestock ☐ Dewatering ☐ Injection

☐ Thermal ☐ Other

(5) BORE HOLE CONSTRUCTION

Depth of Completed Well 486 ft. Special Standard: ☐ Yes (attach copy)

BORE HOLE			SEAL			Amount	Sacks/lbs
Dia	From	To	Material	From	To		
10"	0	35	bentonite	0	35	30	
6"	35	98					
8"	98	133	cement	98	133	9	
6"	133	486					

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

☒ Other bentonite poured in dry

Backfill placed from ft. to ft. Material

Filter pack from ft. to ft. Material Size

(5a) ABANDONMENT USING UNHYDRATED BENTONITE:

Calculated Amount Proposed to be Used: sacks/lbs

Actual Amount Used: sacks/lbs

(6) CASING/LINER

Csg	Linr	Dia	+	From	To	Gauge	Steel	Plastic	Welded	Thrd
X		6"	+	1 1/2	133 1/2	250	X		X	
	X	4 1/2		6	486			X		

Shoe ☐ Inside ☒ Outside ☐ Other Location of shoe(s) 133 1/2

Temporary casing ☐ Yes Diameter From To

(7) PERFORATIONS/SCREENS

Perforations Method drilled

Screens Type Material

Perf	Scrn	Csg	Linr	Screen Dia	From	To	Screen/ slot width	Slot length	# of slots	Tele/ pipe size
X			X		446	486	3/8"		120	4 1/2

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

☐ Pump ☒ Bailer ☐ Air ☐ Flowing Artesian

Yield gal/min Drawdown Drill stem/Pump depth Duration (hr)

60 200 1 1/2 hrs

Temperature 55 °F Lab analysis ☐ Yes By

Water quality concerns? ☐ Yes (describe below) TDS ppm

From To Description Amount Units

(9) LOCATION OF WELL (legal description)

County Washington Twp 2N Nor S Range 3W E or W W.M.

Sec 29 NE 1/4 of the NW 1/4 Tax Lot 1400

Tax Map Number Lot

Lat " or DMS or DD

Long " or DMS or DD

Street Address of Well (or nearest address) 15600 NW Roads En

Banks Oregon 97106

(10) STATIC WATER LEVEL

	Date	SWL (psi)	+	SWL (ft)
Existing Well/Pre-Alteration				
Completed Well	1-29-13			232

Flowing Artesian? ☐ Yes Dry Hole? ☐ Yes

WATER BEARING ZONES Depth water was first found 350

SWL Date	From	To	Est Flow	SWL (psi)	+	SWL (ft)
1-29-13	350	365	10			232
1-29-13	415	430	15			232
1-29-13	472	486	35			232

(11) WELL LOG

Ground Elevation

Material	From	To
brown soil	0	2
brown clay	2	5
red brown sandstone	5	12
red clay	12	48
brown clay	48	69
red clay	69	82
brown sandstone	82	98
grey rock	98	386
grey rock w/clay + wood	386	471
grey rock	471	460
grey rock w/clay + wood	460	471
grey rock	471	486

Date Started 11-19-12 Completed 1-29-13

(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 Received Date MAR 06 2013

Signed APR 29 2024 RECEIVED BY OWRD

(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 1430 Date 2-16-13

Signed Jeff Rabon Received

Contact Info. (optional) APR 29 2024

14450 - OWRD

STATE OF OREGON

WATER SUPPLY WELL REPORT

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

WELL LABEL # L 113897

START CARD # 210675

(1) LAND OWNER

Owner Well I.D. _____

First Name MATTHEW

Last Name HUNT

Company _____

Address 32790 NW PEACEFUL LANE

City NORTH PLAINS

State OR

Zip 97133

(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☐ Thermal ☐ Injection ☐ Other _____

(5) BORE HOLE CONSTRUCTION

Special Standard ☐ Attach copy _____

Depth of Completed Well 515 ft.

BORE HOLE			SEAL			Amt	sacks/
Dia	From	To	Material	From	To		
10	0	30	Bentonite	0	25	16	S
6	30	350					
8	350	428	Cement	350	428	20	S
5.5	428	515					

How was seal placed:

Method ☐ A ☒ B ☐ C ☐ D ☐ E☒ Other POUR SLOWLY & PROD

Backfill placed from _____ ft. to _____ ft. Material _____

Filter pack from _____ ft. to _____ ft. Material _____ Size _____

Explosives used: ☐ Yes Type _____ Amount _____

(6) CASING/LINER

Casing	Liner	Dia	+	From	To	Gauge	Stl	Pstc	Wld	Thrd
☒	☒	6	☒	2	428	250	☒	☒	☒	☒
☐	☐		☐				☐	☐	☐	☐
☐	☐		☐				☐	☐	☐	☐
☐	☐		☐				☐	☐	☐	☐
☐	☐		☐				☐	☐	☐	☐

Shoe ☐ Inside ☐ Outside ☐ Other Location of shoe(s) _____Temp casing ☐ Yes Dia _____ From _____ To _____

(7) PERFORATIONS/SCREENS

Perforations Method _____

Screens Type _____ Material _____

Perf/S	Casing/Screen	Liner	Dia	From	To	Screen/Slot width	Slot length	# of slots	Tele/pipe size

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

☐ Pump ☐ Bailer ☒ Air ☐ Flowing Artesian

Yield gal/min	Drawdown	Drill stem/Pump depth	Duration (hr)
80		515	1
80		425	25
50		325	25

Temperature 54 °F Lab analysis ☐ Yes By _____Water quality concerns? ☐ Yes (describe below)

From _____ To _____

RECEIVED BY OWRB

JUL 17 2014

(9) LOCATION OF WELL (legal description)

County WASHING Twp 2 N N/S Range 3 W E/W WM

Sec 35 SW 1/4 of the NE 1/4 Tax Lot 207

Tax Map Number _____

Lot _____

Lat _____ or _____

DMS or DD

Long _____ or _____

DMS or DD

☐ Street address of well ☒ Nearest address

32790 NW PEACEFUL LANE

(10) STATIC WATER LEVEL

Date _____ SWL (psi) + SWL (ft)

Existing Well / Predeepening			
Completed Well	07-08-2014		59

Flowing Artesian? ☐ Dry Hole? ☐

WATER BEARING ZONES

Depth water was first found 434

SWL Date	From	To	Est Flow	SWL (psi)	+ SWL (ft)
07-07-2014	434	505	24		59
07-08-2014	505	515	56		59

(11) WELL LOG

Ground Elevation _____

Material	From	To
BROWN CLAY	0	19
GRAY CLAY	19	29
STICKY BROWN CLAY	29	43
SOFT BROWN SILTY CLAY	43	59
STICKY BROWN CLAY WITH GRAY STREAKS	59	135
STICKY GRAY CLAY WITH SOFT GRAY	135	
BROWN SEAMS		194
SOFT BROWN SANDY CLAY	194	198
STICKY GRAY CLAY WITH OCC. BROWN	198	
STREAKS		295
RED BROWN CLAY	295	314
BROWN, GRAY BROWN CLAY WITH BROKEN	314	
ROCK		363
GRAY & BROWN CLY W/ROTTEN WOOD STRK	363	405
GRAY BROWN CLAY	405	419
GRAY SANDSTONE WITH CLAY	419	433
GRAY CLAY	433	434
GRAY, GRAY BROWN BASALT	434	478
GRAY BASALT	478	515

Date Started 06-23-2014 Completed 07-08-2014

(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 1492

Date 07-09-2014

Password: (if filing electronically)

Signed *Mike Biggs*

APR 29 2024

(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 1266

Date 07-09-2014

Password: (if filing electronically)

Signed _____

Contact Info (optional) _____

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

SEP 24 1990
WATER RESOURCES DEPT.
SALEM, OREGON

(START CARD) # 20118

(1) OWNER:

Name James & Chantal Faruolo
Address 808 S.W. 175th Pl.
City Beaverton State OR Zip 97006

(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 455 ft.
Explosives used Yes ☐ No ☒ Type _____ Amount _____

HOLE			SEAL			Amount sacks or pounds
Diameter	From	To	Material	From	To	
10	0	179	Cement + Bentonite	0	179	38
6	179	455				

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

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	1	179	250	☒	☐	☒	☐
					☐	☐	☐	☐
					☐	☐	☐	☐
					☐	☐	☐	☐
Liner:	4	5	455		☐	☒	☐	☐
					☐	☐	☐	☐

Final location of sheets) none

(7) PERFORATIONS/SCREENS:

☒ Perforations Method DRILL
☐ Screens Type _____ Material _____

From	To	Slot size	Number	Diameter	Tel./pipe size	Casing	Liner
435	455		40	578		☐	☒
						☐	☐
						☐	☐
						☐	☐
						☐	☐

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

☐ Pump ☐ Bailer ☒ Air ☐ Flowing Artesian

Yield gal/min	Drawdown	Drill stem at	Time
5		440	1 hr.

Temperature of water _____ 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 Wash Latitude _____ Longitude _____
Township 2N N or S. Range 3W E or W. WM.
Section 29 NE 1/4 NW 1/4
Tax Lot 510 Lot _____ Block _____ Subdivision _____
Street Address (or nearest address) Malvern Road Banks, OR.

(10) STATIC WATER LEVEL:

305 ft. below land surface. Date 9-19-90
Artesian pressure _____ lb. per square inch. Date _____

(11) WATER BEARING ZONES:

From	To	Estimated Flow Rate	SW
374	383	3	30
393	397	2	30

(12) WELL LOG:

Material	From	To	SW
Red Clay	0	26	
Brown Clay	26	150	
Weathered Rock	150	165	
Med. Gray Rock	165	205	
Seamy Gray Rock	205	240	
Brown Rock	240	289	
Gray Rock	289	295	
Brown Rock	295	334	
Dark Gray Rock	334	346	
Gray Rock	346	374	
Black Por Rock	374	383	30
Gray Rock	383	393	
Black Rock	393	397	30
Brown Clay	397	402	
Blue Clay	402	406	
Brown/Gray Clay	406	418	
Dark Gray Sandstone	418	446	
Dark Gray Clay	446	455	

Date started 9-17-90 Completed 9-19-90

(unbonded) Water Well Constructor Certification:

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

14450 - 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. work performed during this time is in compliance with Oregon v construction standards. This report is true to the best of my knowledge and belief.

WWC Number 715
Signed Don Frabin Date 9-20-90



April 17, 2024

Oregon Water Resources Department
Attn: *Water Rights Services Division*
725 Summer St. NE Ste A
Salem, Oregon 97301

RE: CITY OF BANKS – PERMANENT TRANSFER APPLICATION FOR CERTIFICATE 95849

Dear OWRD Staff,

Please find accompanying this letter an Application for Permanent Water Right Transfer for the City of Banks (City) Certificate 95849. The City currently has one point of appropriation (POA) on this right, City Well-2. The City is proposing to add six potential well locations distributed throughout the City with the intent of eventually developing viable wells at up to three locations. No change the place of use or character of use is proposed.

The goals of this transfer are threefold. While Well-2's infrastructure has the capacity to produce the full water right rate (1.0 cfs), local drawdown response limits long-term production at that rate. Additional wells would allow the City to minimize that drawdown effect by distributing production across multiple wells. Similarly, additional wells would allow for rotational pumping operations to optimize production under this right to support future peak demands. Finally, the proposed wells will be critical for the testing and operation of the City's proposed Aquifer Storage and Recovery system.

The proposed well locations are not on City-owned property. One of the proposed POAs (WTP) is located on a lot that the City is currently in negotiations to purchase. The remaining POAs are on developer-owned lands. The City has obtained agreements with the landowners for access to drill, construct, develop, and operate municipal wells at the proposed locations. Landowner consent forms are included in this application package (Attachment 3).

The Permanent Water Right Transfer application is accompanied by a variety of supplemental forms and attachments:

- Reimbursement Authority (RA) Request for Expedited Review
- Attachment 1 – Transfer Map
- Attachment 2 – Evidence of Use Affidavit
- Attachment 3 – Landowner Consent Form
- Attachment 4 – Land Use Information Form
- Attachment 5 – Well-2 Well Log
- Attachment 6 – Basalt Aquifer Memorandum
- A check from the City for the RA fee of \$125
- A check from the City for the transfer application fee of \$3,890

Received
APR 29 2024
OWRD

Please let us know if there are any issues with processing this application or questions regarding the information included therein. Thank you for your assistance.

Sincerely,

CwM H2O, L.L.C.



Robert Long, CWRE

Received
APR 29 2024
OWRD

Permanent Transfer Application Checklist

Check the Certificates in WRIS

Transfer # T-14450

Checked by <u> Dante </u> Date <u> 5/2/2024 </u>	Type of Change(s) Proposed: NO other changes allowed other than those listed	
Fee Received: \$3890	☐ POU ☐ POD ☐ APOD ☐ POA ☒ APOA ☐ USE	
Calculated Fee: \$3890		How many rights to be Transferred? 1
Deficiencies and Observations:		Certificate #(s) 95849

If OK, check box; if not, fill in.

- ☒ 1. Is the applicant information complete? Have all the applicants listed at the top of the page signed at the bottom?
If not, what is missing? Whose signature is missing? _____
- ☒ 2. Has the applicant indicated that the place of use is in or near an irrigation district? Have they included a Form D? ☒ N/A.
Name of the District _____
- ☒ 3. Part 5 of application, has the applicant completed the entire page and does the information match the description of the explanation of the reasons on Part 4 of the application?
If not, you may need to contact the applicant or agent? _____
- ☒ 4. For multiple certificates, do each of the certificates listed on Application Page 1 have their own separate completed Part 5 tables 1 & 2? (*compare with OAR 690-380-3220-may need to return*)
If no, which certificates are missing a separate Part 5, tables 1 & 2? _____
- ☒ 5. Has the map been completed and signed by a CWRE? Does the map meet the requirements?
If not, what is missing? _____. Map waiver included? ☐
- ☒ 6. If a change in point of appropriation, have the well logs been included? ☐ N/A.
- ☒ 7. If a change in place of use within Umatilla County, have the applicant(s) provided a Supplemental Form U? ☒ N/A.
- ☒ 8. Has applicant filled out the Minimum Requirements Checklist (Part 1 of 5)? Is the application complete? If not, what is missing (check Evidence of Use and Land Use)? _____

- ☒ 9. If all boxes on this checklist are checked (with no remaining deficiencies identified), accept the application. Put this check sheet in the transfer folder.

OR:

- ☐ This application is deficient, and **CANNOT** be accepted.
It should be returned and the **deficiencies listed in the "staff" section at the bottom of Application Page 1**, unless the applicant or agent can resolve the deficiencies within 2-3 days.

Actions taken:

_____ date _____

Permanent Transfer Application Checklist

FEE WORKSHEET for PERMANENT TRANSFER (except Substitution)			
1	Base Fee (includes one type of change to one water right for up to 1 cfs)	1	\$1,360
	Types of change proposed: ☐ Place of Use ☐ Character of Use ☐ Point of Diversion/Appropriation Number of above boxes checked = _____ (2a) Subtract 1 from the number in line 2a = _____ (2b) <i>If only one change, this will be 0</i>		
2	Multiply line 2b by \$930 and enter » » » » » » » » » » » » » » » »	2	0
	Number of water rights included in transfer _____ (3a) Subtract 1 from the number in 3a above: _____ (3b) <i>If only one water right this will be 0</i>		
3	Multiply line 3b by \$520 and enter » » » » » » » » » » » » » » » »	3	0
	Do you propose to add or change a well, or change from a surface water POD to a well? ☐ No: enter 0 » ☐ Yes: enter \$410 »		
4		4	0
	Do you propose to change the place of use or character of use? ☐ No: enter 0 on line 5 » ☐ Yes: enter the cfs for the portions of the rights to be transferred (see example below*): _____ (5a) Subtract 1.0 from the number in 5a above: _____ (5b) If 5b is 0 or less, enter 0 on line 5 » If 5b is greater than 0, round up to the nearest whole number: _____ (5c) and multiply 5c by \$350, then enter on line 5 »		
5		5	0
6	Add entries on lines 1 through 5 above » » » » » » » » » » Subtotal:	6	0
	Is this transfer: ☐ necessary to complete a project funded by the Oregon Watershed Enhancement Board (OWEB) under ORS 541.932? ☐ endorsed in writing by ODFW as a change that will result in a net benefit to fish and wildlife habitat? If one or more boxes is checked, multiply line 6 by 0.5 and enter on line 7 »		
7	If no box is applicable, enter 0 on line 7 »	7	0
8	Subtract line 7 from line 6 » Transfer Fee:	8	