2

He He Properties of America G-18342
544 N Heights Dr
Eagle Point, OR 97524

Name [redacted]
By
Addre

Priority July 15, 2016
County Jackson WM# 13

Application No. G- 18342
Permit No.
Certificate No.

Date
DENIED
MISFILED
WITHDRAWN Volume | Page
CANCELLED

FEES PAID

Date	Amount	Receipt No.
7/15/16	1,900.00	120537
9-15-16	1850.00	121306
9-27-17	810.00	124754
	Cert. Fee	

FEES REFUNDED

Date	Amount	Receipt No.

RELATED FILES

DEVELOPMENT Date
Completion
Extended to
Final Proof received
Proposed Cert. Mailed

ASSIGNMENTS

Date	To Whom	Address

REMARKS

MAP LOCATION

Rev. 04/03

HS 7/15/2016

9.6.16

Applicant will submit amended application to add storage component to app. (+ fee)

Receipt for Request for Land Use Information

Applicant name: Mr Louis Liu

City or County: Jackson County Staff contact: Jacob Ripper

Signature: [signature] Phone: 541-774-6907 Date: 6-16-2016

RECEIVED BY OWRD
JUN 20 2016
SALEM, OR

RECEIVED BY OWRD
JUL 15 2016
SALEM, OR

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

G-18342

He He Properties of America

[redacted]

544 N Heights Dr

Eagle Point, OR 97524

9590 9402 2628 6336 8324 47

2. Article Number *(Transfer from service label)*

7016 0340 0000 0163 7989

COMPLETE THIS SECTION ON DELIVERY

A. Signature

X

☐ Agent
☒ Addressee

B. Received by *(Printed Name)*

C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

RECEIVED

AUG 22 2017

OWRD

3. Service Type

- ☐ Adult Signature
- ☐ Adult Signature Restricted Delivery
- ☐ Certified Mail®
- ☐ Certified Mail Restricted Delivery
- ☐ Collect on Delivery
- ☐ Collect on Delivery Restricted Delivery
- ☐ Insured Mail
- ☐ Insured Mail Restricted Delivery (over $500)
- ☐ Priority Mail Express®
- ☐ Registered Mail™
- ☐ Registered Mail Restricted Delivery
- ☐ Return Receipt for Merchandise
- ☐ Signature Confirmation™
- ☐ Signature Confirmation Restricted Delivery

PS Form 3811, July 2015 PSN 7530-02-000-9053 WR/SP

Domestic Return Receipt

MCCARTY Patricia E * WRD

From: MCCARTY Patricia E * WRD
Sent: Monday, October 02, 2017 9:36 AM
To: mark_wiest@yahoo.com
Cc: MCCARTY Patricia E * WRD
Subject: He He Properties G-18342 Protest
Attachments: G-18342 Protest.pdf; 2017-09-29 LT OWRD re_ corrections to protest.pdf

Dear Mr. Wiest,
I have received the G-18342 application file and protest to the Proposed Final Order. Department rules require that I provide you a copy even though you should have received a copy from the protestant's attorney, Janet Neuman. A copy of the protest is attached, along with a letter from Ms. Neuman correcting minor errors in the protest.

I will contact you soon to discuss the protest and the options for moving forward to a permit. I've spoken to Shavon Haynes so I have some background on Mr. Harrington's concerns. Please let me know the best way and time to contact you. If you are hard to reach, you may call me at my direct line below or by this email address.

Please feel free to ask any questions or share any ideas you may have to resolve this protest.

I look forward to speaking with you soon,

Sincerely,
Patricia McCarty
Protest Program Coordinator
Oregon Water Resources Department
503-986-0820

MCCARTY Patricia E * WRD

From: MCCARTY Patricia E * WRD
Sent: Thursday, October 19, 2017 11:43 AM
To: Janet.Neuman@tonkon.com
Cc: MCCARTY Patricia E * WRD
Subject: Protest to G-18342 He He Properties

Hi Janet,
I've had a chance to talk with the applicant and would like a chance to talk with you or your client about opportunities to resolve the protest. Can you let me know if and when you have some time to talk with me? I'll be around through Friday this week but out of the office next Tuesday, Wednesday and Friday.

Sincerely,
Patricia McCarty
Protest Program Coordinator
Oregon Water Resources Department
503-986-0820

MCCARTY Patricia E * WRD

From: Janet Neuman <Janet.Neuman@tonkon.com>
Sent: Thursday, September 28, 2017 1:37 PM
To: MCCARTY Patricia E * WRD
Subject: RE: Protest to G-18342 [IWOV-PDX.FID1016364]

Thank you, Patricia.
Jan

From: MCCARTY Patricia E * WRD [mailto:Patricia.E.Mccarty@oregon.gov]
Sent: Thursday, September 28, 2017 1:34 PM
To: Janet Neuman
Cc: MCCARTY Patricia E * WRD
Subject: Protest to G-18342

Dear Ms. Neuman,
Please see attached letter and receipt.

Sincerely,
Patricia McCarty
Protest Program Coordinator
Oregon Water Resources Department
503-986-0820

MCCARTY Patricia E * WRD

From: MCCARTY Patricia E * WRD
Sent: Thursday, September 28, 2017 1:34 PM
To: Janet.Neuman@tonkon.com
Cc: MCCARTY Patricia E * WRD
Subject: Protest to G-18342
Attachments: G-18342 Protest rec'd ltr.pdf; G-18342 Protest fee receipt.pdf

Dear Ms. Neuman,
Please see attached letter and receipt.

Sincerely,
Patricia McCarty
Protest Program Coordinator
Oregon Water Resources Department
503-986-0820

Oregon
Kate Brown, Governor

Water Resources Department
725 Summer St NE, Suite A
Salem, OR 97301
(503) 986-0900
Fax (503) 986-0904

VIA EMAIL ONLY

September 28, 2017

Janet Neuman
Tonkon Torp LLP
1600 Pioneer Tower
888 SW Fifth Avenue
Portland, OR 97204
Janet.Neuman@tonkon.com

Re: Receipt of protest on Application G-18342 in the name of He He Properties of America

Dear Ms. Neuman,

Attached is a PDF copy of receipt #124754 for check #52384 in the amount of $810.00 in payment of the fee to file the protest to the Proposed Final Order on Application G-18342. I will review the protest and contact the parties regarding the concerns raised.

Please contact me directly with any questions.

Sincerely,

Patricia McCarty

Patricia McCarty
Protest Program Coordinator
Water Right Services Division
503-986-0820
patricia.e.mccarty@oregon.gov

Attachment

TONKON TORP LLP
ATTORNEYS

1600 Pioneer Tower
888 SW Fifth Avenue
Portland, Oregon 97204
503.221.1440

Janet E. Neuman

Direct Dial: 503.802.5722
Direct Fax: 503.972.7422
Janet.Neuman@tonkon.com

September 29, 2017

Via Email Only: patricia.e.mccarty@oregon.com
Patricia McCarty
Protest Program Coordinator
Water Right Services Division
Oregon Water Resources Department
725 Summer Street NE, Suite A
Salem, OR 97301

Re: In the Matter of Water Rights
Application G-18342
He He Properties of America

Dear Ms. McCarty:

I am writing with two small corrections to the Protest filed on September 27th on behalf of Richard and Kathryn Harrington against the PFO on G-18342.

On page 6, in the last sentence of the first paragraph, the figure of "220 acre feet" should be corrected to read "120 acre feet." On page 8, footnote 6 should be corrected to read "The well logs show 16 wells in Sections 21, 22, 27, and 28 that measure 60 feet or less in depth."

Please include these corrections in your file. Thank you.

Sincerely,

Janet E. Neuman
Senior Counsel

JEN/jw
c: Richard W. Harrington, Protestant
Kathryn T. Harrington, Protestant
He He Properties of America, Applicant
Mark Wiest, Applicant's Agent

039333/00001/8395196v1

STATE OF OREGON
WATER RESOURCES DEPARTMENT

RECEIPT # 124754

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

INVOICE # _____

RECEIVED FROM: Tonkon Torp LLP Attorneys

BY:

APPLICATION	G-18342
PERMIT	
TRANSFER	

CASH: ☐ CHECK:# ☒ 52384 OTHER: (IDENTIFY) ☐ _____

TOTAL REC'D $ 810.00

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

47235

	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	SURFACE WATER	$	0202	$
0203	GROUND WATER	$	0204	$
0205	TRANSFER	$		
	WELL CONSTRUCTION	**EXAM FEE**		**LICENSE FEE**
0218	WELL DRILL CONSTRUCTOR	$	0219	$
	LANDOWNER'S PERMIT		0220	$
0223	OTHER (IDENTIFY) Protest Fees			810.00

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		$

RECEIVED
OVER THE COUNTER

____ TREASURY OTHER / RDX

FUND _____ TITLE _____

OBJ. CODE _____ VENDOR # _____

DESCRIPTION _____ $

RECEIVED
OVER THE COUNTER

RECEIPT: 124754 DATED: 9-27-17 BY: _____

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

STATE OF OREGON
WATER RESOURCES DEPARTMENT

RECEIPT # 124754

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

INVOICE # _____

RECEIVED FROM: Tonkon Torp LLP Attorneys

BY:

APPLICATION	G-18342
PERMIT	
TRANSFER	

CASH: ☐ CHECK:# ☒ 52384 OTHER: (IDENTIFY) ☐ _____

TOTAL REC'D $ 810.00

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

47235

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 SURFACE WATER $ 0202 $
0203 GROUND WATER $ 0204 $
0205 TRANSFER $

WELL CONSTRUCTION EXAM FEE LICENSE FEE
0218 WELL DRILL CONSTRUCTOR $ 0219 $
LANDOWNER'S PERMIT 0220 $
0223 OTHER (IDENTIFY) Protest Fees 810.00

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: 124754 DATED: 9-27-17 BY: _____

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

BEFORE THE OREGON WATER RESOURCES DEPARTMENT

In the Matter of Water Rights Application G-18342 He He Properties of America	PROTEST OF PROPOSED FINAL ORDER

I represent Richard W. and Kathryn T. Harrington. This Protest is filed on their behalf pursuant to ORS 537.621(7) and OAR 690-310-0160.

1. Protestants' names, addresses, and telephone numbers (ORS 537.621(7)(a))

Richard W. Harrington and Kathryn T. Harrington
P. O. Box 192
Butte Falls, Oregon 97522
541-865-3711

2. Protestants' Interest in the Proposed Final Order (ORS 537.621(7)(b))

On August 15, 2017, OWRD issued a Proposed Final Order ("PFO") proposing to approve Application G-18342 in the name of He He Properties of America ("He He") for a permit to withdraw 0.167 cfs of groundwater from a well in the Hog Creek Basin in Jackson County, for year-round nursery use on 30.0 acres of land in Sections 27 and 28, Township 35 South, Range 1 West, W.M. Protestants own Plum Thickets Farm, which is adjacent to the He He property along its northern boundary, as shown on Exhibit 1 attached to this Protest. Protestants have two wells on their property, JACK 2932 (originally drilled in 1968, reconditioned in 1995 under Well Log 34376) and JACK 62926, drilled in 2017, located approximately as shown on Exhibit 1, p. 1. The well location proposed in G-18342 is less than a quarter-mile from Protestants' two wells.

As described in further detail below, Protestants are concerned about the impact to their wells and to the local groundwater resource from the uses of groundwater proposed in G-18342. Protestants also represent the public interest in the likely impact to other wells in the vicinity of the proposed wells. Exhibit 1 shows the locations of He He's proposed wells in relation to the Harringtons' wells and certain other nearby wells.

3. Description of Impairment of Protestants' Interest (ORS 537.621(7)(c))

Protestants disagree with the PFO's finding that "[g]roundwater will likely be available within the capacity of the resource, and if properly conditioned . . . the proposed use of groundwater will avoid injury to existing groundwater rights." PFO at p. 2, ¶ 8. Groundwater cannot be determined to be available for the proposed use, and the proposed conditions are insufficient to protect Protestants' wells and water right, as well as the rights of other well owners in the vicinity.

Furthermore, Protestants, other well owners, and the public were deprived of a full and fair opportunity to understand and comment on the Applicant's full proposal. The Initial Review ("IR") did not describe Applicant's proposal to store water. Other groundwater users and members of the public therefore were not given sufficient notice of this aspect of the application. The belated and cursory mention of storage in the PFO cannot remedy this insufficiency and does not substitute for the required notice and comment. Without information about the storage proposal, other water users and the public could not determine during the comment period how the storage reservoir will be constructed, operated, and managed, in order to consider if it will injure the quantity and quality of groundwater available to the senior users. Protestants and others must now use a Protest (including an $810 fee) to raise issues they should have been able to raise during the public comment period.

4. Error/correction of error (ORS 537.621(7)(d))

a. The Department erred in its description of the proposed water use in the Initial Review that was noticed for public comment on October 7, 2016, requiring correction and a new public comment period.

The Department admitted in the PFO that the IR was incomplete and in error:

> "The Department has determined an error was made in the Initial Review as to the proposed use. The applicant indicated on Page 5 of the application that the proposed use will also include storage. The determinations of the Initial Review should be corrected to reflect the proposed use will include storage." PFO at p. 2, ¶ 4.

That statement anticipates issuance of a corrected IR. However, the IR was not corrected. The failure to include a description of the proposed storage in the IR as it was published for public comment deprived Protestants and other members of the public of a complete understanding of the proposed water use and precluded them from fully commenting about the potential impacts of the storage proposal to their existing water rights and water use. Furthermore, the public relies on the IR to understand the Department's position on the application and to frame comments submitted to the Department. When OWRD realized its mistake, it should have published a corrected IR for public comment instead of raising the new use for the first time in the PFO.

The PFO stated that "[a]dditional conditions have been added to the draft permit" to reflect the proposed reservoir, but the draft permit says very little about storage. It does not list a location for the proposed storage and does not describe anything about how the reservoir is to be constructed, operated, or measured. The only references to the storage use in the draft permit are a requirement for a berm around the reservoir "to exclude overland flow of surface water" and a note that ODFW might require a fish screen before stocking the reservoir with fish if the reservoir has an outlet. PFO/Draft Permit, Section 5.

It may have been Mr. Harrington who flagged the storage issue for the Department. Mr. Harrington submitted written comments during the public comment period on the IR, which said, in part:

> "Applicant told me in August that he will build pond and raise fish using the well water. That pond excavation is far along. Pumping groundwater into a pond in an area of high pan evaporation is a questionable use of water. Does the applicant have or need a permit for such?"[1]

When the Department issued a PFO without correcting and re-noticing the IR, Mr. Harrington submitted a "Request for Recision of Defective Proposed Final Order for Application G-18342" on August 29, 2017. He noted that, in providing comments on an IR:

> "the public assumes that 1) the application has been found to be complete; 2) that the 'determinations of the Initial Review' are based upon an accurate review of the application; and 3) that the Application Procedures and Review will be followed—specifically, that comments submitted will be considered in drafting the PFO. In proceeding to the PFO stage without disclosing the corrections in 'the determinations of the Initial Review' that 'should be corrected,' the public has been denied an opportunity to comment . . . . 'Comments' are to be made following publication of the IR; 'protests' are to be made over the substantive details of the PFO . . . . As a result of the procedural sleight-of-hand in the present case, issues normally raised at the comment stage must now be dealt with at the protest stage. An interested party must pay $810 and file a protest in order to comment on substantive issues that should have been considered in writing the PFO. I am requesting that this PFO be rescinded, a corrected IR be published, and the statutorily required comment period be allowed."

Mr. Harrington's original comments on the IR and his rescission request are attached to this Protest as Exhibits 2 and 3.

As it turned out, Mr. Harrington's information about the storage proposal turned out to be partially inaccurate, thus illustrating the very purpose of publishing complete and accurate information about water rights applications. The excavation he thought was for the fish pond (and which he observed holding water at various times) was in fact a borrow pit dug in 2016, while He He apparently proposes storage in a different location. Revised pages of Application G-18342 added to the WRIS *after* notice and comment on the IR refer to the storage proposal as a "bulge-in-the-system" ("BIS") but do not say anything about the proposal to raise fish in the pond. The Harringtons still do not know exactly what is proposed, and they have therefore not had an opportunity to express their full concerns about the storage component of Application G-18342—other than a brief, undocumented discussion on site with OWRD staff on September 7, 2017.

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[1] Protestants question whether this proposed use is "aquatic life water use" as defined in OAR 690-300-0010(3), for instance.

Recognizing that they have only limited information at this time, Protestants nonetheless have several substantive concerns about the proposed storage reservoir. These concerns include questions about potential contamination to groundwater from nitrogen-rich water leaking from the reservoir during the dry season and concerns that the reservoir will act as a 'sump' during the wet season, based on the observations of the borrow pit as described above, as well as on their knowledge of local groundwater movement. Depending on the specific proposal, Protestants and the public could well have other concerns, including wasting water by evaporation, promoting mosquito breeding, and the impact of storage on existing water users as discussed further in Section 4c below.

On September 20th, Mr. Harrington sent a follow-up email to Doug Woodcock, Deputy Director, again requesting a response to his rescission request. Mr. Woodcock responded on September 25, saying that "it is unlikely that a PFO would be rescinded and a new IR undertaken." Mr. Harrington therefore feels compelled to file this Protest to protect his rights.

b. OWRD erred in its treatment of the issue of water availability.

The PFO for Application G-18342 says that "groundwater will likely be available within the capacity of the resource," referring to the Groundwater/Hydrology Section's assessment in the file. There are a number of problems with the groundwater assessment for this application.

First of all, the groundwater review does not affirmatively find that water is available. Instead, the reviewer checked a box that says the source "cannot be determined to be over appropriated during any period of the proposed use." OAR 690-300-0010(57) defines "water is available" to mean "the requested source *is not over-appropriated* . . . during any period of the proposed use." (Emphasis added.) The rule calls for an affirmative finding that water is *not* over-appropriated, whereas the groundwater review form allows the reviewer to say "We don't know, so we're going to grant the permit anyway." This is precisely the criticism that was leveled at the Department in a recent state audit and also in the recent investigative journalism series "Draining Oregon."[2]

The assessment also says that "data are sparse but suggest reasonable stability in the *subject aquifer* (see hydrograph)." (Emphasis added.) The reference to the "subject aquifer" is unclear. Indeed, the groundwater review uses the word "aquifer" inconsistently throughout its discussion. Section B3 of the assessment says only that the applicant proposes to use water from "the fractured volcaniclastic bedrock aquifer," but the aquifer is not identified by depth, extent, or characteristics. The same paragraph notes that "[w]ell-to-well interference is unpredictable in

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[2] The Oregonian said: "Consider how regulators evaluate applications to pump. A state reviewer fills out a form asking whether water is available to support a prospective well. Forms marked 'cannot be determined' routinely get the go-ahead, a review of hundreds of permit applications shows." Kelly House and Mark Graves, *Draining Oregon: Water giveaway threatens livelihoods, wildlife*, THE OREGONIAN, August 26, 2016. *See also* OREGON SECRETARY OF STATE AUDIT REPORT 2016-33 on the Water Resources Department, published in December of 2016.

fractured rock aquifers because fractures are not continuous or consistently connected . . . ." raising further questions about just what is meant by the "subject aquifer." In Section A4, the groundwater review says that no well construction details, including well depth, were provided in the application, so the nearest located well (Protestants' well, JACK 2932/34376) was used to "estimate the well description." This paragraph then says that "well construction conditions are recommended in Section B2 to address this uncertainty." However, Section B2 says merely that the well should be conditioned "to allow groundwater production only from "a single aquifer in the bedrock groundwater reservoir." Instead of filling in the blanks describing the depths of the top and bottom of the identified aquifer, the rest of the condition has been stricken out.

Furthermore, the hydrograph included with the assessment contains a total of eight static water level ("SWL") measurements from only one well—which, again, is Protestants' well, JACK 2932/34376. The scale of the hydrograph obscures the month and year of the SWL measurements. Between each five-year mark on the X axis, there are only four dividing lines, so that each line represents 1.25 years, with no way to identify months. To be meaningful, successive measurements should be done as closely as possible to the same month and day as the previous measurement, but it is impossible to tell if that is the case. There were apparently no measurements between 1968 and 1995 and none between 1995 and 2010, yet the sparse data points are joined by a solid line. A casual observer might conclude that the water level rose from about 1968 to 1995, then declined until 2011, and became erratic after that. The connecting line thus gives an erroneous impression of converting sparse raw data to significant information.

At issue is whether these very limited data points "suggest reasonable stability in the subject aquifer." Although Mr. Harrington acknowledged in his comments on the IR that the few measurements from this well may represent a normal range of variation and relative stability *for this well*, the measurements do not prove anything about the capacity of the area groundwater resource to support additional pumping, especially since they represent such a limited time frame.[3] It is important to note that one of Protestants' permitted wells has not yet been used to produce water. Due to problems with well construction and liner placement, "Well 2" permitted under G-16926 has not yet begun pumping. Thus, the existing *permitted* level of water use has not yet been fully developed.

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[3] Mr. Harrington understands that OWRD staff also took measurements at his well in July of 2017. He has requested the results of those measurements, but he has not received them. As to the previous measurements, to the best of Mr. Harrington's knowledge, and according to the data available on the Department's website, the first measurement was taken on August 12, 2011, while none of the subsequent measurements were taken in August, though two were taken in July, which, like August is a time of variable water usage for watering yards and gardens depending on the weather, and thus these measurements are not reliable for year-to-year comparisons. The remaining measurements were taken in March and October. *See* http://filepickup.wrd.state.or.us/files/Publications/obswells/tables/table_JACK002932.html. For some reason, the hydrograph on file for this observation well differs from the hydrograph used in the G-18342 groundwater review. *See* http://filepickup.wrd.state.or.us/files/Publications/obswells/wells/well_JACK002932.html.

The data used in the water availability analysis are indeed sparse, as OWRD noted, and they do not support a conclusion of "reasonable stability." Nevertheless, even if the data did conclusively show that some identifiable aquifer is reasonably stable under *current* exempt usage, that information alone is insufficient to support OWRD's conclusion that "groundwater will likely be available within the capacity of the resource" for He He's proposed use, on top of Protestants' already-permitted use. In fact, the annual volume available in excess of exempt and permitted demands compared to the 220 acre feet annual draft being proposed by He He is unknown.

Another troubling aspect of the groundwater assessment for Application G-18342 is that it is inconsistent with groundwater reviews for other permit applications in the immediate vicinity. For example, in 2002, the Department issued an IR of Application G-15618, submitted by Jim and Violet Johnson.[4] This application proposed use of 0.402 cfs of groundwater from two wells for irrigation of 35.9 acres of land. That acreage is also located in Sections 27 and 28, T 35 S, R1 W, just north of, and adjacent to, Protestants' property. The proposed well locations in G-15618 were within not much more than a quarter of a mile of the location proposed in He He's Application G-18342, and within a quarter mile of Protestants' wells, as shown on Exhibit 1. The IR for G-15618 stated as follows:

> "The Department has determined, based upon available data, that the use of groundwater from the proposed wells will not likely be available in the amounts requested without injury to prior groundwater rights and/or within the capacity of the groundwater resource."

When the Johnsons' water rights consultant, Hollie Cannon, followed up with the Department about the IR, he was told that the reasons for the unfavorable finding were (1) past well problems "with the geologic formation that your wells are located in;" (2) "neighboring wells close by;" and (3) "evidence of well decline in this area." The groundwater review reported "anecdotal information of water problems" in the area and further stated:

> "This appears to be supported by the number of well deepenings in section 33. . . . Given the request is for such a large quantity of water out of material that commonly does not provide a long-term stable supply, *it raises the specter of both well interference and whether the aquifer can sustain the use.*" (Emphasis added.) *See* Exhibit 4.

Apparently, the Department suggested that Mr. Johnson conduct pump testing in order to demonstrate whether a lesser amount of withdrawal could be permitted. According to a conversation Mr. Harrington had with Mr. Cannon, the testing was not done because its cost was

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[4] Although WRIS lists this application folder as "Destroyed," Mr. Harrington was able to obtain a copy of the IR and the groundwater review from the Department. Mr. Harrington also obtained a copy of a March 19, 2002 letter from water rights consultant Hollie Cannon to Jim Johnson (the permit applicant) describing Mr. Cannon's conversation with Doug Woodcock at the Department about OWRD's reasons for the unfavorable finding in the IR of this previous application. Copies of the Initial Review of G-15618 (including the groundwater review), and the Cannon letter are attached to this Protest as Exhibits 4 and 5.

prohibitive. The Johnsons' application was eventually denied in a final order, according to WRIS.

Ten years later, in 2012, OWRD issued Protestants' Permit G-16926. This permit authorizes the Harringtons to pump 0.34 cfs during the irrigation season to irrigate 40 acres, for a total annual volume of 100 af. This represents a lower rate of appropriation than the Johnsons had previously requested (and been denied) nearby. Although the Department did not expressly mention the Johnson application, the groundwater review of Protestants' application stated the following regarding groundwater availability in Section B3:

> "Water level data are sparse for this area . . . . [T]he applicant proposes monitoring static water levels over time to balance use with the capacity of the groundwater resource. *In light of the lack of data to otherwise demonstrate the resource's long-term capacity*, I think this is a reasonable approach . . . ." (Emphasis added.)

Protestants' permit was granted for less water than the Johnsons had requested some 10 years earlier. But if the new application by He He for 0.167 cfs (120 af, due to year-round use) is added to Protestants' already-permitted use, the total amount is 0.507 cfs, which exceeds the rate of withdrawal that was denied the Johnsons in G-15618 because of groundwater unavailability and the potential for injury to prior appropriators. It is error for the Department to approve issuance of the He He permit without explaining why its findings in the two previous reviews are not problematic for the new application. Review of well logs on file with OWRD shows numerous wells drilled in the general vicinity during the years since the denial of Application G-15618, suggesting that even less groundwater is available than was available in 2002, subjecting many more wells to significant impacts in a single drought year such as 2001.

Other inconsistencies in OWRD's review of nearby groundwater permit applications also cast doubt on the finding of water availability. In the groundwater review of Application G-18350 for the XP Property south of the He He parcel, the Department says "Nearby JACK 2932 [Harrington well] has SWL data for the past five years but the data record is insufficient to provide a preponderance of evidence that groundwater in the area *is or is not over-appropriated*." (Section B3) (Emphasis added.) The XP wells are shown on Exhibit 1, p. 2. The IR for G-18350 proposed to deny the application, just a matter of months ago. Once again, the Department should distinguish and/or reconcile this earlier recommendation with the PFO on He He's application.

c. The PFO erred in finding no injury to other water rights.

The groundwater review for Application G-18342 states in Section B3: "There are 47 well logs on file for Sections 27 and 28 combined, indicating *moderate* groundwater development for small exempt uses." (Emphasis added.) In the recent G-18350 review cited earlier, the Department said that there are "over 200 wells" in Sections 27, 28, 33, and 34, "suggesting *abundant* exempt use." (Emphasis added.) "Abundant" is more accurate than "moderate," but the bottom line is that it is not clear just how many wells—exempt or

otherwise—are in the vicinity.[5] Furthermore, some of these wells are very shallow.[6] In any event, the number of wells in either two or four sections is not necessarily an adequate proxy for determining the extent of the geographic area that is dependent on the "aquifer" affected by He He's proposal, nor the number of at-risk shallow wells. As the groundwater review itself says: "well-to-well interference is unpredictable in fractured rock aquifers. . . ."

As noted above in Section 4.b. above, the hydrograph from one of Protestants' wells, which is used as an OWRD observation well, shows considerable variability in the last few years. However, since 2010, the nearest significant wells—those located on the Willamette Egg Farm property south of He He's parcel, now owned by XP Investments—have not been used, as that facility discontinued operation in the summer of 2010.[7] This means that the variability in JACK 2932/34376 has resulted only from seasonal factors and nearby exempt well uses. The Johnson application (G-15618) discussed earlier suggests that in a dry year like 2001, domestic wells will feel the effects of nearby pumping very quickly.

Thus, the impact of He He's relatively high volume pumping for irrigation and year-round nursery use on Protestants' wells and other wells in the vicinity should not be underestimated. Failure of a domestic well, or of Protestants' irrigation wells in the middle of an irrigation season, would be catastrophic and expensive. Even without total failure, pumping costs could increase. The conditions proposed to be included in He He's permits are completely insufficient to respond to such impacts on a timely basis. The Draft Permit attached to the PFO would require He He only to measure SWL annually in March. Protestants question whether measurement at a time when groundwater levels are likely to be seasonally high will provide an appropriate baseline. Measurement during and at the end of the irrigation season would give much needed information about the impact of irrigation on water levels. Protestants also question whether March measurements, at a time when groundwater levels are likely to be ephemerally high, will provide an appropriate baseline for estimating aquifer recharge.

Protestants also question the efficacy of another of the proposed conditions to prevent catastrophic water level decline, specifically: "*Following the first year* of water use, the user shall report seven consecutive annual [March] static water level measurements. The first of these seven annual measurements will establish *the reference level against which future annual measurements will be compared.*" (Emphasis added). If He He begins pumping in the spring of an average water year, and if by the following March the SWL has declined 10 feet, then the reference level for the next seven years will be 10 feet lower than what the SWL was before any pumping began. If, following the second year of pumping, the March measurement finds a decline of another 10 feet, then only a 10-foot decline will be recorded for purposes of the allowable water level decline thresholds. At the end of a third consecutive year with a 10 foot decline, the threshold of "a water level decline of 15 feet or more in fewer than five consecutive

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[5] If the bordering sections on the north—Sections 21 and 22—are included, the number of wells doubles.

[6] The well logs show 16 wells in the four sections referenced in the G-18342 groundwater review that measure 60 feet or less in depth.

[7] As also discussed in Section 4b above, Application G-18350 to pump 1.96 cfs from some of those existing wells was recently proposed for denial.

years" will have been crossed. However, by then the SWL could actually have declined 30 feet overall from the before-pumping level. Given that there are some exempt wells as shallow as 30 feet within a one mile radius, the proposed permit is not "properly conditioned" to prevent harm to senior water rights.

Similarly, the proposed permit states that "the water user shall discontinue use of, or reduce the rate or volume of withdrawal from, the well(s)" if certain specified events occur—including if "hydraulic interference leads to a decline of 25 or more feet in any neighboring well with senior priority." With the Protestants' newest senior well also using as the baseline the SWL from the March following its first year of pumping, the 25-foot interference threshold for that well will not account for the amount of any decline incurred during its first year of pumping, including any decline caused by He He's pumping during that same year. Thus, He He's pumping could contribute to an exaggerated lowered reference level for the senior user. The conditions as stated do not address this flaw.

To further complicate matters, there are no provisions about when, how, or by whom interference is to be determined, nor who will bear the cost of such determination, nor the responsibility for damages to senior users that might result from the failure of the conditions to prevent an overdraft. It is particularly unclear just how the discontinuance of pumping by the junior user following a March SWL measurement that finds a decline of over 25 feet in the seniors' well is a remedy for damages already suffered by any senior user the previous year.

Furthermore, the conditions do not adequately address interference with senior exempt users. Such interference will only be discovered after declining water levels have resulted in complaints about well problems, problems that are not necessarily reversible in the middle of the dry season. Additionally, without any data about the capacity of the aquifer, a March measurement is worthless for predicting whether there is sufficient water to service the exempt users plus the senior and proposed junior right in an upcoming season.

Finally, He He proposes to use water year-round for 'nursery use' (and perhaps to keep their storage pond full year round, though that is not clear). If He He contributes to the depletion of the limited groundwater resource during the time outside the irrigation season, resulting in a shortage for Protestants during the season, Protestants' senior rights will be injured. Likewise, if water becomes unavailable to Protestants during the irrigation season, while He He's pond has already been filled, use of that stored water for irrigation will also constitute injury to the senior water rights, as will the very act of filling the pond in a water-limited year.

As the PFO is written, the permit is not properly conditioned, and will not avoid injury to existing groundwater rights. Until the parameters of the "aquifer" are established and water availability is better understood, any interference by the junior user is potentially harmful to any senior users.

5. Citations to supporting legal authority (ORS 537.621(7)(e))

Pertinent statutes and administrative rules include at least the following:

ORS 537.525 and OAR 690-008-0001 (stating the state's policy on groundwater use)

ORS 537.620(6) and OAR 690-310-0090 (requiring public notice and a 30-day public comment period for the Initial Review of a groundwater permit application)

ORS 537.620(4), ORS 537.621, OAR 690-310-0130, and OAR 690-310-0140 (pertaining to water availability, injury to other water rights, whether the public interest presumption is established and/or has been rebutted and whether the proposed use will impair or adversely affect the public welfare, safety, and health)

OAR 690-300-0010(57) and (58) (defining water availability)

6. Other necessary or interested persons (OAR 690-002-0030(1)(c))

Applicant:
He He Properties of America
544 N. Heights Dr.
Eagle Point, OR 97542

Applicant's Agent:
Mark Wiest
12148 Meadows Rd
White City, OR 97503

Michelle Colby Kielman
P.O. Box 1129
Eagle Point, OR 97524
(current owner of Johnson property; submitted comment on G-18342)

Other owners of wells in the vicinity of the proposed He He wells and storage reservoir have an interest in protecting their exempt and/or permitted wells, and in protecting the groundwater resource from both overpumping and pollution.

7. Protest fee (ORS 537.621(7)(f))

A non-applicant fee of $810 accompanies this Protest. However, Protestants request refund of this Protest fee pursuant to ORS 536.050(4) because the Department should not proceed with the Protest but instead should issue a corrected Initial Review as noted in the PFO and should re-notice Application G-18342 for public comment based on the corrected IR in order to correct the Department's mistake and assure fairness to the public.

8. Proof of service (OAR 690-002-0030(2)

A Certificate of Service is attached.

DATED: September 26, 2017.

TONKON TORP LLP

By: _____

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Facsimile: 503.972.7422
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Of Attorneys for Protestants

CERTIFICATE OF SERVICE

I hereby certify that I served the foregoing **PROTEST OF PROPOSED FINAL ORDER** on:

He He Properties of America
544 N. Heights Dr.
Eagle Point, OR 97542
Applicant

Mark Wiest
12148 Meadows Rd
White City, OR 97503
Applicant's Agent

☐ by faxing a copy thereof to each attorney at his last-known facsimile number on the date set forth below;

☑ by mailing a copy thereof in a sealed, first-class postage prepaid envelope, addressed to each attorney's last-known address and depositing in the U.S. mail at Portland, Oregon on the date set forth below;

☐ by causing a copy thereof to be e-mailed to each attorney at said attorney's last-known email address on the date set forth below;

DATED: September 26, 2017.

TONKON TORP LLP

By: _____

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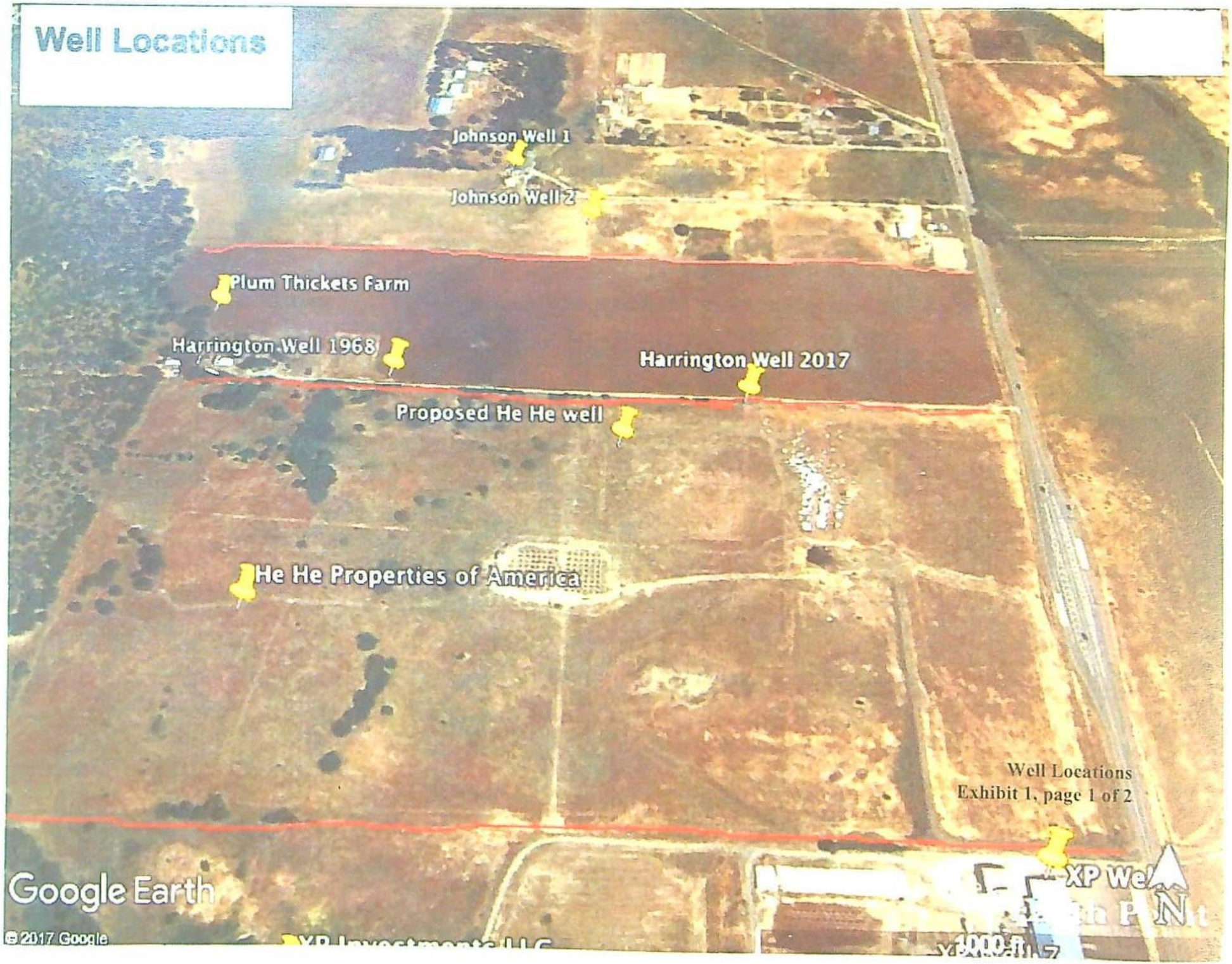
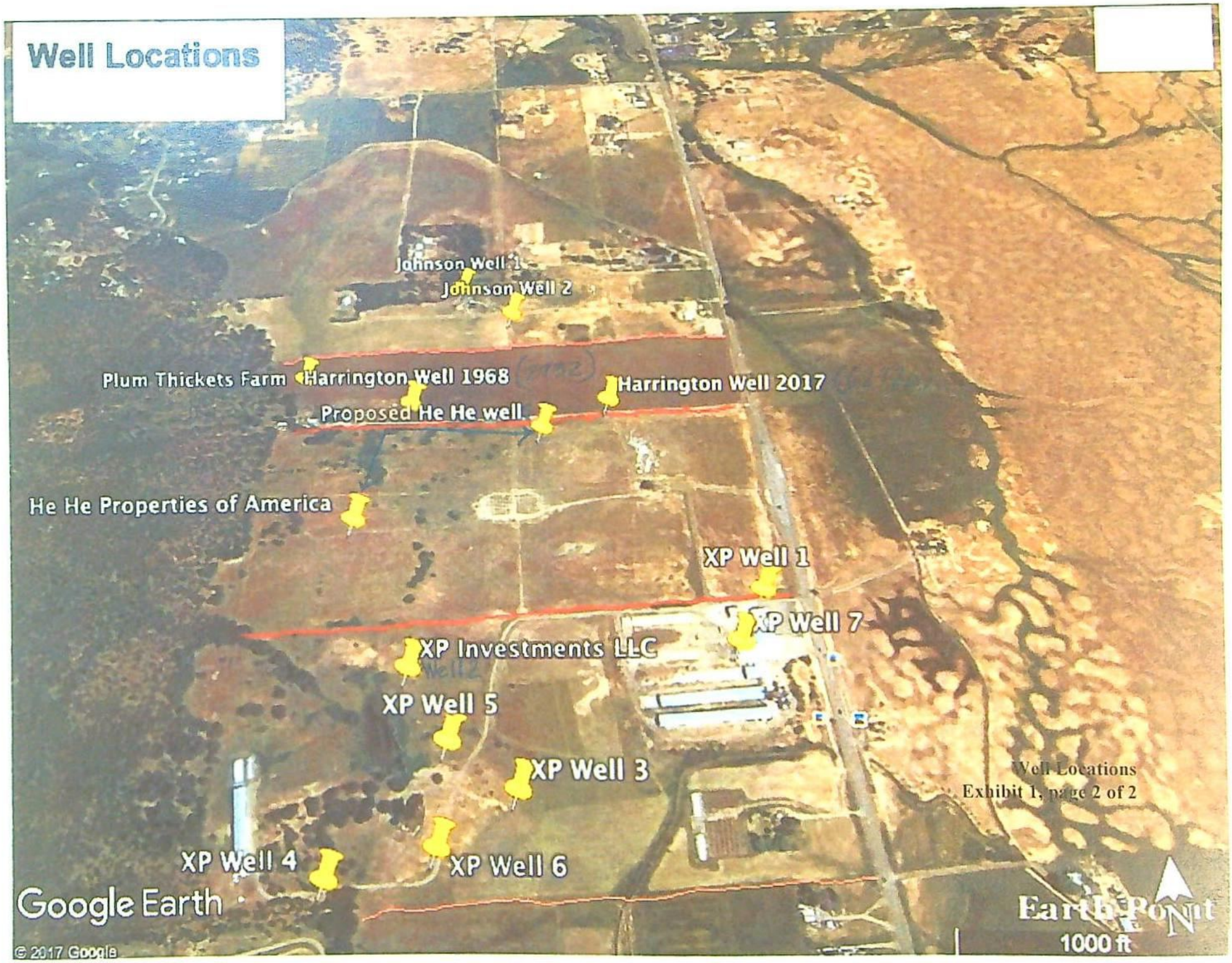

Well Locations
Johnson Well 1
Johnson Well 2
Plum Thickets Farm
Harrington Well 1968
Harrington Well 2017
Proposed He He well
He He Properties of America
Well Locations
Exhibit 1, page 1 of 2
Google Earth
© 2017 Google



Well Locations
Exhibit 1, page 2 of 2

Comments Regarding The Initial Review for Application G-18342

My wife and I are the holders of Permit G-16926, which allows the diversion of 100 acre-feet for the irrigation of 40 acres (2.5 acre-feet per acre) at a withdrawal rate of 0.34 CFS. On July 15, 2016, He He Properties of America submitted Application G-18342 to appropriate 90 acre-feet of groundwater on property contiguous to ours near Eagle Point, Oregon. The Initial Review (IR) concludes that "[t]he appropriation of 0.167 CFS of water from Well 1 in Hog Creek Basin for year round nursery use on 30.0 acres is allowable." They will be allowed 120 acre-feet (4 acre feet per acre). We believe that the IR erred in its conclusion.

Affected Area Background Information

In 1870, Civil War Veteran Marvin Wood built a house on the site now occupied by the former Willamette Egg Farm (WEF), a little over 1/4 mile from the Point of Appropriation (POA) for G-18342. In 1946, when Highway 62 was widened, the house was moved to the other side of the highway. Details on the original well are not recorded, but given the well technology of the time, it had to have been a hand dug well, suggesting the development of a spring. On our property is an impressive 6 foot diameter hand dug well. The first 4 feet is encircled in concrete which extends a foot or so above ground level, and below the concrete the walls are fractured rock. The date of construction is unknown, but it is likely over 100 years old. Twice in the last 5 years the well was almost filled to the rim of the concrete. Both years I got stuck in the mud with my tractor when attempting to disc weeds immediately down slope from the well . This well was likely constructed at the site of a spring, because just uphill I have found Native American artifacts consisting of stone flakes and discarded arrowheads that did not meet quality standards, suggesting a camp site near a spring. About 1/4 mile distant is the site of a seasonal seep where numerous matates for grinding seeds have been found, indicating another Native American water source campsite. I know of 2 other seasonal groundwater discharge sites within the same 1/4 mile radius, plus one more northeast of the WEF. These localized discharges indicate breeches in confined aquifers.

The oldest domestic well log found by searching the WRD website for Sections 27 and 28, T35S, R1W is dated 1958. Searching for sections 27 and 28, one finds logs for dry wells, logs for hole deepening and liner installation—inflating the estimate of the number of wells potentially affected from aquifer overdraft if one counts only the number of well log entries. On the other hand, there are wells for which a log is not listed, either because they predate well log filing, or because of noncompliance with filing requirements—deflating the estimate of the number of potentially affected wells. My domestic well, probably drilled between 1968-1972 has no log on file. My neighbor also has a domestic well not on file that probably predates record keeping. This lack of accuracy is moot, however, because the number of exempt wells in the area potentially affected by overdraft is at this point unknowable because the geographical area dependent upon the affected aquifer is itself unknown. The unknown aquifer is somewhere between very local up to something on the scale of the Ogallala aquifer. Obviously the recharge area is also unknown. Nothing is known—there is insufficient data to draw any conclusions about the aquifer at this time except that it is confined.

In addition to the domestic exempt usage, up until recently there was also an "industrial use" exemption under which the WEF operated. This exemption allows 5,000 gallons/day (gpd), but since the business had facilities on 2 tax lots, they may have been allowed 10,000 gpd. The first well log recorded for the WEF is dated 1966. It is noteworthy that pumping just 6.94 gallons/minute (gpm) for 24 hours produces 10,000 gpd. It is also noteworthy that between 1966 and 1990, the WEF drilled at least 9 wells. Based on baler and air driller tests ranging from 30 to 250 gpm, any one of their wells could have supplied 6.94 gpm. One possible explanation for the well drilling overkill is that the gpm estimated on the basis of a 1 or 2 hour well driller test might be a gross overestimate of the aquifer(s) actual ability to deliver on a sustained 365-day basis. Another possible explanation for the large number of wells drilled is that the WEF may have been using much more than the 10,000 gpd allowed. The WEF discontinued operation of its Eagle Point facility in the summer of 2010, and in 2011 buildings were being torn down. The property was sold in the summer of 2016 to XP Investments which filed Application G-18350.

When we applied for a water right in 2011, there were no significant groundwater rights on record within the general area. The only information hinting at the quantity of water that might be available was that from drillers' air tests and from a 2003 4-hour metered test pumping of our well, the only known test pump data in the area. However, the water level was not measured beyond the first 15 minutes, nor the time required to reach a new SWL, nor was a new SWL determined. The availability of water in sufficient quantity for the perfection of our permit is therefore only speculation.

The local Watermaster's office has measured the static water level in our well over the past 5 years, but not every year. Since 2010 there has been no WEF usage, so with the exception of my metered use of 0.60 acre feet in 2013 and 0.80 in 2014, these data document the seasonal variability in the SWL in my well solely attributable to exempt domestic wells and natural processes.

Discussion of Groundwater Availability Remarks

The WRD document: The PUBLIC INTEREST REVIEW FOR GROUNDWATER APPLICATIONS, B3. Groundwater availability remarks (GARs) states that: *There are 47 well logs on file for Sections 27 and 28 combined, indicating moderate groundwater development for small exempt uses.* This observation is of no value in determining groundwater availability. As pointed out above, the tallying of well logs is not accurate because of reporting issues. But more importantly, even if all wells are accurately reported, because the extent of the aquifer dependent area is unknown, such a tally is a meaningless exercise.

Static water level data are sparse but suggest reasonable stability in the subject aquifer (see hydrography).

The SWL data are indeed sparse. There are two sources of this data. One consists of well drillers air and baler tests, which are of limited accuracy because of the limitations of the measurement methodology, and because the process of cleaning the well of cuttings during drilling draws water from the aquifer, so that a true "static" measurement is questionable. In addition, such data is reported for different years and for different months of the year, so are only very roughly comparable.

The second source is the data collected by Shavon Haynes of the Jackson County Watermaster's office beginning in August of 2011. These measurements do indeed "suggest reasonable stability in the subject aquifer". With the exception of my use of 0.60 acre feet in 2013 and 0.80 in 2014, the variability measured represents variable annual recharges, exempt well usage, and hypothetical natural spring discharges exiting the Hog Creek Basin. The limited data documents that the annual exempt user demand has not exceeded the average annual recharge capability over the period of monitoring. But, the data provides zero information as to how many additional acre feet are available in excess of the current demand such that the average annual recharge is capable of maintaining a stable (not trending downward) SWL.

There may be available water, or there may not. The 5 springs/seeps previously noted to be active in some years represent what? Probably leaks in the temporarily overloaded underground "streams" as water is moving downgradient from Long Mountain. None of these run more than a few feet from their source, then reenter the "aquifer" in a manner comparable to river flood waters—the water is not lost but is temporarily stored . From springs such as these the net loss to groundwater is only from evaporation and immediate area plant use. The only water in excess of the current demand would be water that discharges from unknown springs to a stream that drains to the ocean: maybe Hog Creek, maybe Little Butte, maybe the Rogue. Do such hypothetical springs discharge under current usage? Nobody knows.

On the other hand, the recharge area may be far larger than the potentially affected area, and the "aquifer" in question may be large enough to provide my permitted 100 acre feet, plus the 120 proposed to be approved, with no measurable downward trending SWL. Nobody knows.

In addition, aquifer recharge may not be limited to precipitation. The Eagle Point Irrigation District (EPID) may be a contributor in 3 ways: 1), from infiltration from flood irrigated lands; 2), from nearby irrigation laterals dug into permeable fractured bedrock; and 3), from leakage of the EPID irrigation canal carrying around 100 cfs that originates near Butte Falls and traverses many miles of mountainous terrain before reaching the lowlands near Eagle Point for distribution. The net effect of these—nobody knows. To the extent that EPID is a factor in this aquifer's water supply, in drought years EPID is forced to reduce allocations to conserve water in Willow Lake given the unpredictability of future water years, so in drought years EPID may be a much reduced contributor.

Groundwater will likely be available within the capacity of the resource.... (Initial Review Determinations # 4.) As previously noted, the limited SWL data begins in 2011, a full year after the WEF closed down, so we can not measure the impact of that usage on the SWL. As also previously noted, there is no information on the WEF's actual usage, but considering the number of wells it drilled, its usage may well have been in excess of 10,000 gpd (11.2 acre feet/year). If usage was in great excess of 10,000 gpd, then the water formerly used could now (post 2010) be wasting to the ocean via springs as indicated by the relative stability of the SWL (not trending higher) and this water could be available for appropriation. Another possibility might be that the subject aquifer is very large, in which case the SWL may be little affected year-to year by the appropriation of an additional 220 acre feet.

Maybe, but a review of Johnson suggests otherwise. By chance, we were recently surprised to discover that we were not the first to apply for groundwater rights in this area. In 2001 Jim and Violet Johnson drilled a domestic well at a site on their contiguous property, about 3/16 of a mile from my permitted well. Apparently encouraged by the air test of 80 gpm, they drilled a second well less than 6 weeks later for the purpose of obtaining an irrigation right. This second well air tested at 100 gpm. Their application (G-15618) was received 24 days after the second drilling. Without offering any alternative to "the amounts requested", the IR rejected their request, stating:

"*The Department has determined, based upon available data, that the use of groundwater from the proposed wells* ***will not likely be available*** *in the amounts requested without injury to prior groundwater rights and/or within the capacity of the groundwater resource.*" [Emphasis yours.]

So, what was the "available data" upon which this denial is based? The file for G-15618 has been deleted from the WRD data base, but G-15618 is still listed and indicated "denied". So the trail goes cold…but not completely. As mentioned above, we learned of Johnsons' denial by chance. In a conversation with Water Rights Surveyor Hollie Cannon about filing the necessary paper work to perfect our permitted water right, he shocked us with the information of Johnsons' application and denial next door in 2002. Without his memory and retained files, we would be oblivious to this important information relevant to the capacity of the subject aquifer. Because the file for G-15618 has been destroyed, it is not possible to review the *Groundwater availability remarks* for such, nor the "available data" upon which the determination was based. However, we do have the Initial Review and a letter from Mr. Cannon to Mr. Johnson dated March 19, 2002. He wrote:

I discussed you[r] filing with Mr. Doug Woodcock of the Water Resources Department today. The reasons for the unfavorable finding in the "initial review" are
1) There have been well problems in the past with the geologic formation that your wells are located in.
2) There are neighboring wells close by.
3) There is evidence of well decline in the area.

This is very interesting and important new information for several reasons. To restate the above: neighboring domestic well owners dependent upon the volcaniclastic aquifer in question contacted the WRD with complaints about their domestic wells running dry in 2001. Whether these complaints were in response to Johnsons' application (unknown if complainants were aware of Johnsons' application), or whether timing of the complaints was coincidental is unknown, but since the file has been destroyed, we shall never know. However, in the first paragraph of page 3 of that IR is noted that DEQ found that "the source of water identified in you application is "Water Quality Limited". Without contacting the DEQ we have no idea as to the parameters of concern. it would be logical to presume that since the WRD was raising this as an issue in support of its denial of G-15618—namely that this water appropriation would significantly impact the concentration of pollutants by the lack of dilution and therefore water quality—then complaints about groundwater levels were not made up. In any event, the WRD took the well owners seriously enough and denied the application.

By organizing monthly precipitation records from the National Weather Service station at the Medford airport into October-September water years (WYs), we find that the 2000-2001 WY was exceptionally dry [Johnsons' unfortunate application timing could not have been much worse]:

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jne	Jul	Aug	Sep	WY Total
1999-2000	1.72	1.94	0.89	5.00	2.76	1.52	3.59	0.75	0.43	0.58	0.07	0.38	19.63
2000-2001	1.51	1.24	0.98	1.00	0.82	1.55	1.15	0.40	0.38	0.19	0.03	0.79	10.04
2001-2002	0.19	4.16	4.35	1.59	1.65	1.33	1.49	0.53	0.03	0.08	0.00	0.53	15.93
2009-2010	0.65	1.22	1.81	2.77	1.03	2.10	2.92	1.53	1.00	0.00	0.66	0.79	16.68
2010-2011	2.06	1.94	4.31	1.73	1.23	4.26	2.12	2.20	0.69	0.60	0.00	0.01	21.15
2011-2012	0.65	1.99	0.94	2.76	2.19	3.72	1.92	1.10	2.36	0.07	0.00	0.00	17.70
2012-2013	1.96	5.10	5.71	0.96	0.49	0.56	1.04	0.69	0.39	0.00	0.42	2.76	19.78
2013-2014	0.20	1.12	0.36	0.78	4.55	3.50	0.82	0.47	0.54	0.10	0.63	2.04	15.11
2014-2015	2.59	1.95	2.28	1.25	3.20	1.45	0.60	0.33	0.31	0.29	0.04	0.25	14.54
2015-2016	0.46	1.57	7.73	4.22	1.03	2.45	0.96	0.33	0.57	0.45	0.00	0.01	19.78

The reason for the reported well problems almost jumps off the page—drought. A correlation between precipitation and groundwater SWL is not unexpected, but what is so very interesting is that the domestic users felt the impact so quickly, that there was not a year or more of grace provided by reserves from 1999-2000, considering that most domestic pumps are set relatively deep compared to the SWLs that have been reported by the Watermaster beginning in 2011. This strongly indicates that the capacity of the aquifer in question is far less than we all would like, that at any time we are only one year away from drought conditions adversely impacting domestic well users. Two drought years, huge trouble for domestic users. It is painful to even think about it. Well deepening does not create water, and is not cheap, nor is the associated pump retrofitting and manipulations, to say nothing of the nightmare of buying water by the truck load, disinfecting and integrating it into the plumbing system.
Not exactly the same as Flint, but very close!

It is also important to consider that the WEF's water use is unlikely to have been reduced due to the 2000-2001 drought. Not knowing its actual usage, we cannot know the WEFs impact on the "well problems". If it were only using 10,000 gpd (11.2 acre feet/year), then the aquifer capacity is precariously small and cannot withstand even my 100 acre feet allocation in an average year. On the other hand, it is hard to imagine how thirsty chickens, egg washing, pen cleaning operations and cooling could use an amount approaching 220 acre feet, or even 100 acre feet. Scaling the chicken raising buildings from the Google Earth view on my computer screen, I estimate that the chicken occupied buildings occupied a total of 3.3 acres. Dividing 100 acre feet by 3.3 acres gives a height of 30 feet of water for the chicken rearing area that would have been used per year. Unlikely and unbelievable. This suggests that in a sub-normal WY my 100 acre feet alone is more than likely grossly excessive; an additional 120 acre feet on top of that should be totally out of the question. What amount can be safely allocated without jeopardizing domestic users in a one year drought? At this time, nobody knows, but it is probably less than 100 cfs.

Did the WRD consider the Johnson denial in the IR for G-18342? If no, why did it ignore this precedent, because a minimal record G-18342 is still in its data base? This additional information must be considered in the decision process. **Johnson requested 0.42 cfs, and was denied; with the approval of G- 18342 the total appropriation would be 0.507 cfs. What is the source of this additional water not available in 2002?**

Interference

Well-to-well interference is unpredictable in fractured rock aquifers because fractures are not continuous or consistently connected, so there is some uncertainty regarding the potential for interference with the nearby senior groundwater right.

We do not dispute this, but disagree on how to detect and evaluate the potential.

On October 24, I sent a request to Elisabeth Graham (caseworker authoring the IR) requesting that the SWLs of the existing wells of the former Willamette Egg Farm, my well, and wells of my neighbor to the north (the Johnson wells) be measured in order to determine possible hydraulic connectivity before wet season recharge becomes a factor in SWL measurements. If, at this time of the year (now), when inflow and outflow to the subject aquifer(s) is minimal, SWLs adjusted for well head elevation differences should reveal whether one, or more than one aquifer services these wells for which there is "some uncertainty regarding the potential for interference". Such measurements will never again be possible once wet season impacts the water table and my irrigation season use and year-round withdrawal under "nursery use" begins. I received no response to my request.

The requested SWL measurement data would provide information useful for understanding the hydraulic connectivity between the wells, reducing *some* [of the] *uncertainty*. If SWL differences are beyond what can be attributed to the slow asymptotic approach to equilibrium due to permeability limitations of the bedrock and the diminishing rate of transport as SWL pressure differences between distant wells diminish, then that would be evidence that the wells are serviced by different (or at least very poorly connected) aquifers. Since water usage at the WEF facility is not now permitted beyond exempt usage (no longer industrial), and exempt usage in the vicinity of my and the Johnson wells is currently seasonally reduced to household uses (that largely returns to groundwater via the septic systems), if there are not significant differences in SWLs proposed to be measured, then it could be concluded that in the area extending from the WEF to the Johnson wells we are dealing with one aquifer. The He He property lies between these two areas.

Since we are not doing that suggestion, how about one from the WRD. In the 2002 letter from Hollie Cannon to Jim Johnson, Hollie details what he learned from Mr.

Woodcock about how to proceed if the Johnsons wished to try to continue in the face of the denial:

The information needed to proceed with the filing is
1) Information on adjacent well (location and well logs)
2) Pump test one of your wells to determine the effect on neighboring wells.

The test pump procedure is to get access to the neighboring well. Pump your well for up to eight hours. Measure the draw down in your well and the neighboring well during the test pump. Then after the test pumping is done continue to measure the water level in the neighboring wells to determine how much water can be withdrawn without harm to the neighboring wells.

Once the WRD has this information they will determine how much water can be withdrawn without harm to the neighboring wells.

Under certain conditions this test pumping could definitively resolve the issue of interference. If there were no drawdown, the matter would be settled. If there were drawdown, then the wells are connected and the only question is the rate of drawdown in the passive well. That sounds good. But there are conditions under which the test results would not be acceptable as a basis for quantifying how much water can be withdrawn without harm to the neighboring wells. For example, when the aquifer is actively recharging from infiltration in the uplands during the wet season, wells such as mine at a higher elevation may register the peak of the recharge flow sooner than wells at a lower elevation in the same way that towns on a flooded river will experience the flood crest in the order determined by their respective locations on the river. When the aquifer is spilling water to the surface (such as described above when I have gotten stuck in the mud on my tractor near the overflowing developed spring due to excess pressure in the aquifer) interference test pumping will be unreliable because the drawdown and recovery in both wells will be distorted compared to the dry season (when the down slope recharge flow is greatly reduced and the SWLs in the wells are relatively stable). [See 2) below]. An additional consideration is that the pumped water be discharged at a sufficient distance from the well to eliminate the possibility of rapid return to groundwater during the pumping and recovery.

The difficult question would be, how much interference based upon the test pumping would be acceptable? Referring back to the 2000-2001 domestic well problems, it is clear that the storage capacity of the aquifer can be depleted below an acceptable level in just one dry year. The only unknown is how much water the WEF was taking. Again, if it was 11.2 acre feet (10,000 gpd), then clearly the issue of potential interference between water right holders is not an issue, because there probably is not enough water for the withdrawal of any fraction of our senior right if we are to avoid placing the domestic users (senior to all irrigation rights) in jeopardy. In the unlikely event that the WEF was taking 100 cfs, then clearly our 100 cfs is too much and must be scaled back in order to avoid going into the wet season with the aquifer depleted below some prudent SWL benchmark (during the irrigation season, not the following March) yet to be determined. In other words, the only interference issue is between the senior exempt users and the Harringtons, not between the Harringtons and He He, taking us back to the basis for the 2002 Johnson denial.

As a practical matter, in the IR proposed approval of He He, the WRD says:

The proximity to neighboring POAs raises the potential for interference with senior groundwater users, ***but pumping drawdown effects in a fractured aquifer are not expected to be widespread.*** [Emphasis mine.]

With almost totally unknown parameters to describe the subject aquifer, in view of the potential harm to the senior exempt users, such a statement is indefensible and irresponsible. On what data is this expectation based?

The WRD's remedy for this lack of a data/information based decision: Annual water level and water use monitoring and reporting is recommended to address the potential impact to senior users. Unbelievably inadequate.

As a condition of the permit:

The Department may require the discontinuance of groundwater use, or reduce the rate or volume of withdrawal, from the well(s) if any of the following events occur.

D. Hydraulic interference leads to a decline of 25 or more feet in any neighboring well with senior priority.

Problems with this remedy are several:
1). Frequency of measurement. SWL measurement is stipulated to be annually, in March. In a hypothetical year, if both we and He He pump throughout the irrigation system following the March measurements, but SWL measurements are not made again until the following March, given that we know very little about the capacity of the aquifer except that domestic wells reported problems in 2001/2002, then reaction to measurements made the following March may be too late to prevent an overdraft already happened that will be felt in the ensuing dry season even in a "normal year", to say nothing of the unthinkable possibilities from a dry winter preceding the following year March measurement.

2) Time of year. March is possibly the worst month for detecting interference. Typically, November through February are the wettest months. March may possibly be the month when aquifer recharge is at its peak depending upon the wet season precipitation timing and intensity and the groundwater flow rate from the uplands. SWLs determined at different wells on the same day are subject to "crest" differences in the same way that towns on a river experience crests displaced in time. To complicate this uncertainty from peak flow location differences, He He will be impacting SWLs year round, making interference interpretation of SWL measurements even more speculative. Ideally, annual SWLs should be measured at the time of year when, absent human activities, equilibrium would be reached. It most definitely is not March.

Evidence in support of my hypothesis that March SWL measurements are unreliable because of underground flow peaks is shown by the following data collected by Shavon Haynes from my well, JACK 2932:

03/25/2013	16.19T
07/23/2013	24.67T
10/21/2013	20.82T
02/03/2016	6.25T
03/09/2016	7.46T
07/01/2016	12.85T
10/04/2016	17.9T

Over the 7 months from March 25 to October 21, 2013 the SWL dropped 4.63 feet. Over the 7 months from March 9 to October 4, 2016, 10.44 feet. Why?

Looking at the Monthly and Water Year Totals we find something interesting:

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jne	Jul	Aug	Sep	WY Total
2012-2013	1.96	5.10	5.71	0.96	0.49	0.56	1.04	0.69	0.39	0.00	0.42	2.76	19.78
2015-2016	0.46	1.57	7.73	4.22	1.03	2.45	0.96	0.33	0.57	0.45	0.00	0.01	19.78

Both WYs by chance had the exact same total precipitation, and did differ in the October SWL by 2.92 feet. What is interesting is that the 2013 March reading was16.19, but for 2016, (a year when I got stuck with my tractor; documented in an email that I sent Shavon at the time; I did not get stuck in 2013) the March reading was 7.46, a difference of 8.73 feet! While the Monthly Totals can be misleading in that if the rate of precipitation exceeds the rate of infiltration water is lost to runoff, the bulk of the 2012-2013 precipitation was in November and December; in comparison, for 2015-2016, the bulk was later, December and January. Also interesting is that on February 3, 2016, the reading was higher than March (6.25 compared to 7.46). This is consistent with the idea that there are groundwater peak flows in response to rainfall events: the earlier groundwater flow peak resulting from precipitation of the 2012-2013 WY probably had long passed by the March 2013 measurement. Further evidence of the unreliability of inflated March SWL readings due to peak flows is the fact noted above: that while the WY Totals were the same, the March-October 2016 difference in SWLs was over twice that in 2013 (10.44 compared to 4.63 feet).

This data analysis supports the idea that SWL readings taken when the aquifer is recharging can lead to misleading conclusions about groundwater levels from year to year; and interference conclusions based upon spring pumping tests would be unreliable.

3) SWL interpretation. The question of interference is really one of how hydraulically connected are the subject wells? If both users are pumping, and domestic use is also dropping the water table (and may be more connected to (affected by) one of the wells than the other), how will the WRD distinguish the effects of each from the others? Unless the WRD can distinguish the effects of the different users, how will it be able to determine that *[h]ydraulic interference [led] to a decline of 25 or more feet in any neighboring well with senior priority [?]*

4) Arbitrary level of 25 feet. The boilerplate figure of 25 has no basis in any data, information, or fact—it is a prepackaged, off-the-shelf number. The WRD has no data on the capacity of the aquifer, the recharge potential in terms of acre feet, the annual acre feet usage by domestic users…nothing. If an annual (March) measurement finds a drop of 25 feet, it may be too late to prevent the disaster for domestic users in the following months. Additionally, in view of the uncertainty introduced by aquifer recharge flow timing (e.g. the 8.63 foot March difference noted above for WYs with identical total precipitation), a drop of 24.99 feet could actually be much greater than indicated by the March measurements. Where would that leave us? Since we are ignorant of meaningful parameters for this aquifer, who really knows the extent of the potential consequences of this arbitrary benchmark?

As discussed in my application in 2011, for a given well the volume availability/SWL relationship can be answered by plotting the amount pumped versus the SWL drop (measured when recovery is flattening out). We know that the permeability of the volcaniclastic rock is highly variable from well logs. Some very deep holes are dry. Most local productive wells encounter confined water generally below 100 feet, indicating either a confining strata or very low permeability above the breeched aquifer. Breeching a confining strata may create more storage capacity above than was naturally available, but it is what it now is. There is no reason to expect that such a plot would be a straight line. It would give us important information about the aquifer's capacity versus SWL drop. Maybe there is adequate water for everyone above the 25 feet benchmark. Maybe 24.99 feet in March is overly generous going into a summer of domestic and irrigation use. It may be that pumping only 10 acre feet will drop the SWL to 50 feet. Nobody knows what to expect. Without more information we are only guessing. To boldly allow aquifer drawdown with only March to March measurements is comparable to driving a car on a long trip with a broken gas gauge and not keeping track of the miles traveled since the last fillip, nor knowing where the next gas station is located. We do know from 2001-2002 that we do not have a very large gas tank, but how small is yet to be determined.

5) No requirement to do test for interference in IR. Since there is no test for interference required before use by He He begins, as was asked of Johnsons before the WRD would even reconsider their application, the public needs to know why the He He application is being fast-tracked, especially when the combined appropriation for the two permitted right is greater than Johnsons' request (0.507 compared to 0.42 cfs)?

6) Burden of proof. In Johnsons' case, the burden of proof was on Johnsons: they were required to prove that interference was inconsequential. In the present case, He He is required to prove nothing. Since the Watermaster operates on a complaint driven basis, the burden falls upon us to detect possible interference and present evidence that will trigger an investigation of such. During the active irrigation season, we may have to get scheduled on an typically busy calendar, and the lag time between our detection and resolution may be great. We would probably voluntarily cease pumping, but what would He He be required to do until the matter is resolved?

In addition, with 2 irrigation and the domestic withdrawals simultaneous, how does the WRD propose to sort this all out, with crops burning up in the heat and tempers flaring? How long of a shut down would be required? Thus the senior user is being put in a position where hydraulic connectivity is not required to be established before He He's use begins; the senior user must try to detect interference during the active irrigation season; and the senior user is subject to a shut down while the matter is being investigated on a timetable determined by the Watermaster's work load.

7) Acceptable level of interference. Without having a data based benchmark for ensuring that the withdrawal by the senior irrigation user does not jeopardize domestic users, the problem is complicated even further by condition D: *Hydraulic interference leads to a decline of 25 or more feet in any neighboring well with senior priority.* How much hydraulic interference, if any, is acceptable in leading to a decline of 25 feet? In surface water management, upstream junior users are prohibited from diverting water until the downstream senior rights are satisfied. In the case at hand, with an unknown supply of water available in our current state of collective ignorance, water pumped by the junior user early in the season may lead to a shut down of the senior right before its needs are satisfied for that irrigation season. This would be a clear violation of the principle of prior appropriation. Only if it is empirically determined that there is water in excess of the domestic users and senior irrigation right needs would any interference be acceptable. If the junior contributes to a decline of 25 feet prompting a shutdown of the senior user, that water is not coming back, and the senior user will have been damaged by the junior user with the approval of the WRD.

To summarize interference, the WRD's proposal for detecting, preventing and managing interference is totally inadequate and unacceptable, potentially leading to crop losses and law suits by multiple affected parties.

Water Quality

It was previously mentioned that in its denial of Johnsons, the WRD raised the issue of potential further water quality degradation were their application to be approved:

Information obtained from the…(DEQ) indicates that the source of water identified in your application is "Water Quality Limited". That means that there are water quality concerns. DEQ will be looking at information from your application to see if additional conditions are needed to protect the water quality situation. One possible outcome is that the Water Resources Department will propose in the proposed final order that your application be denied.

This raises some questions. Is the source of water still "Water Quality Limited"? If not, when did it cease to be so? Was the DEQ consulted in the present matter? Why was this issue not addressed in the Initial Review for He He's application?

It is logical that water quality is related to water quantity, as is the clear implication in the WRD quote above. Not knowing any parameters of this watershed, we do know that associated with the drought of 2001/2002 there was a water quality problem that affected the domestic users. We do not know the source of that problem—it could have been from operations at the WEF, it could have been from the leaching of large animal manure into groundwater, it could have been from the failure of septic effluents to dilute and disperse as in non-drought years (if taken to the extreme, the only ground water would be septic effluent). Whatever the source(s), all we know is that there was a probable drought related pollution problem. Does the WRD intend to ask DEQ to set limits on the amount of groundwater that can be withdrawn before water quality becomes a concern?

A further concern is that the He He plans submitted to Jackson County Development Services indicate a parking lot 300 x 720 feet, which is 4.95 acres. In a conversation with the on-site representative of He He, I learned of plans for 50 employees. That number is inconsistent with the parking lot acreage—that would be 10 vehicles per acre if all employees were on the premises at the same time. There may be many more than 50. In any case, this raises the specter of the discharge of septic effluent on a scale for which there is no precedent in this neighborhood's aquifer. Implementation of septic plans approved at the County level based on perk tests may not be taking into account the open ended employee number and the potential for exacerbation of water quality concerns in a drought that were raised for the Johnsons. In a drought situation, will this operation make the neighborhood well water undrinkable even though wells are not dry? We need answers.

Liability

Who will be liable for damages in the event that the WRD allows agricultural users to use more water than the aquifer can safely provide without jeopardizing the domestic users need for uninterrupted safe drinking water? If agricultural users comply with all conditions stipulated by the WRD, are they indemnified from domestic user lawsuits?

Nursery Use

Application G-18342 is for the appropriation of water for "nursery use". We have two problems with the proposed approval under this legal umbrella.

First, as already touched on, a junior user can not use water to which a senior user is entitled. When the traditional irrigation season ends at the end of October, groundwater

reserves have been depleted to some level depending upon the carryover from the previous year, the previous wet season recharge, and the irrigation season and domestic usage history. Since future precipitation events are unpredictable, it is unknown how much water will be available for domestic senior use during the near, middle, and far future. It is also unknown how much will be available for the senior agricultural user beginning April 1. If the junior user depletes the aquifer storage during the 5 months when traditional agricultural irrigation is not allowed, and it is not replenished during the wet season, then the junior user, with the WRD's approval, is in violation of the principle of prior appropriation. Similarly, "nursery use" cannot take water to which domestic users are entitled. Only if there is a surplus is it permissible for "nursery use" to use water during these months. But we have no data based information on what constitutes "surplus". As has been repeatedly stressed, we know practically nothing about this aquifer, therefore the WRD would be ill advised to approve winter use in our present state of ignorance. We must not forget that only one drought year is sufficient to cause problems for domestic users, so the capacity of this aquifer cannot be large, and as yet we have no means to determine a surplus.

Looking at the issue more formally, the *Groundwater Availability Analysis* concluded: *Static water level data are sparse but suggest reasonable stability in the subject (see hydrography). Therefore, the groundwater resource cannot be determined to be over-appropriated.*

OAR 690-300-0010 (58)
"Water Availability Analysis" means the investigation of stream flow or groundwater measurement records, watermaster distribution records, flow requirements of existing water rights, stream flow modeling in ungauged basins, minimum perennial streamflows, or scenic waterway flow requirements to determine if water is available to support the proposed water use. 690-300-0010

"Water is Available," when used in OAR 690-310-0080, 690-310-0110 and 690-310-0130, means:
(a) The requested source is not over-appropriated under OAR 690-400-0010 and 690-410-0070 during any period of the proposed use; [Emphasis added].

On the basis of 6 data points (8/12 2011; 3/25, 7/23, and 10/21 2013; and 3/19 and 7/21 2014) the *Groundwater Availability Analysis* stated that *the groundwater resource cannot be determined to be over-appropriated.* Based on that finding, the IR then goes on to conclude that *Groundwater will likely be available within the capacity of the resource…* With only two of these measurements barely falling in the "nursery use " window, how can it be concluded that "[t]he requested source is not over-appropriated during any period of the proposed use"?

The Initial Review Determinations states: 4. , ***…and if properly conditioned, the proposed use of groundwater will avoid injury to existing groundwater rights.*** However, there are no conditions given that will avoid injury to existing groundwater rights. And yet the year-round appropriation is allowable—based on 6 SWL measurements!

Secondly, we are concerned that water appropriated under the claim of "nursery use" will be used for the indoor cultivation of mature marijuana plants in the winter months.

According to Wikipedia: "A nursery is a place where plants are propagated and grown to usable size." According to my Webster's New collegiate Dictionary, a nursery is "an area where trees, shrubs or plants are grown for transplanting, for use as stocks for budding and grafting, or for sale."

OAR 690-300-0010 30) "Nursery Operations Use" means the use of water for operation of a commercial nursery which may include temperature control, watering of containerized stock, soil preparation, application of chemicals or fertilizers, watering within greenhouses and uses to construct, operate and maintain nursery facilities. The use of water within plant nursery operations constitutes a different use from field irrigation, although that may be a part of nursery use. If used for field irrigation for nursery stock, such use is not restricted to the defined agricultural irrigation season.

There are two points of confusion here: "watering within greenhouses" may be interpreted by some to mean that growing mature commercial marijuana in a greenhouse constitutes "nursery use" just because of the phrase "watering within greenhouses" is what they want to be able to do. A second point of confusion: "The use of water within plant nursery operations constitutes a different use from field irrigation, although that may be a part of nursery use." That statement may be interpreted by some to say that field irrigation is a nursery use. However, that confusion is clarified with the next sentence: If used for field irrigation for nursery stock…. Taking license to use appropriated water to grow mature marijuana year round would seem to derive from the second part of the sentence: "…such use is not restricted to the defined agricultural irrigation season." But, we are just talking about water use for nursery stock that is sometimes grown in a field, not field irrigation for field crops. By granting water rights for "nursery use" when, in fact, the majority of the water will be used for growing mature plants, both indoors and out, seems like a very sloppy reading of the controlling law, (the full implications of which I will not comment on now).

§ 571.005ÅŠ) Nursery stock includes all botanically classified plants or any part thereof, such as floral stock, herbaceous plants, bulbs, buds, corms, culms, roots, scions, grafts, cuttings, fruit pits, seeds of fruits, forest and ornamental trees and shrubs, berry plants, and all trees, shrubs and vines and plants collected in the wild that are grown or kept for propagation or sale.
Nursery stock does not include:
(a) Field and forage crops.
(b) The seeds of grasses, cereal grains, vegetable crops and flowers.
(c) The bulbs and tubers of vegetable crops.
(d) Any vegetable or fruit used for food or feed.
(e) Cut flowers, unless stems or other portions thereof are intended for propagation.(e) Cut flowers, unless stems or other portions thereof are intended for propagation. [Emphasis added].

Mature marijuana is a field crop, albeit a highly pampered one grown in pots. Compare hemp and flax grown for fiber, mint, all field crops. Immature marijuana grown from seed or rooted cuttings is "nursery stock":

§ 475B.015

(11) Immature marijuana plant means a marijuana plant that is not flowering.
(22) Mature marijuana plant means a marijuana plant that is not an immature marijuana plant.
(27) Propagate means to grow immature marijuana plants or to breed or produce the seeds of the plant Cannabis family Cannabaceae

Here we see that "propagate" is specifically limited to growing immature marijuana plants or mature ones that produce seeds, as **distinguished** from mature ones that are being raised for the unpollinated female flower parts.

The issue may seem academic, but He He is starting out with two 1.2 acre greenhouses; there may be several more planned for the future. As discussed earlier, there is thus far no documentation of water availability for a junior right at any time of the year. It should be emphasized that merely because the agricultural irrigation season is limited to seven months, water during the other five months is not therefore automatically available. No, not before we have data to demonstrate that it is so. Wet season aquifer storage is for the senior users, not for a junior user's winter use merely because they are applying under "nursery use".

When I made my application in 2011, I requested an irrigation season ending November 15 to be able to germinate fall-sown crops so as to avoid frost heaving of seedlings in the event that fall rains arrived late, germination was late, and seedlings were then more vulnerable to heaving. This request was denied. As a matter of fairness, using groundwater past the end of the traditional irrigation season to continue production of mature commercial marijuana under the claim of "nursery use" when such use does not qualify as propagation/nursery use—well that is hard to accept.

Unless there are other controlling Statutes and OARs that I am unaware of, please review your policy regarding "nursery use" with the Attorney General's office.

Other

"Aquifer" confusion in the GARs: *Since the application does not specify a proposed well depth, Condition B2 (c) is recommended to limit well construction to a single aquifer in the fractured bedrock aquifer.* Does this mean that drilling must stop upon the breaching of a confined aquifer as evidenced by water rising in the borehole? How will that be enforced?

Pond: Applicant told me in August that he will build pond and raise fish using the well water. That pond excavation is far along. Pumping groundwater into a pond in an area of high pan evaporation is a questionable use of water. Does the applicant have or need a permit for such?

Re-injection well: Applicant also plans to use the proposed well to supply water to a heat exchanger (heat pump) to maintain greenhouse temperatures, then re-inject this water into a second well. While the net use would be zero, does the WRD have any concerns about which aquifer receives the return water in view of the "single aquifer" limit to well construction? We do have a concern that heated water discharged into the bedrock may, due to the increased solubility of mineral salts at higher temperatures, affect water quality for both human and plant watering.

Conclusion

You say: *...the groundwater resource cannot be determined to be over-appropriated.* Using the same data that you presented and more, we say: the groundwater resource cannot be determined to be under-appropriated without more data. Please consider our comments and please take another look at the He He application.

Thank you for the opportunity to comment.

Richard and Kathryn Harrington

Request for Recision of Defective Proposed Final Order for Application G-18342

Procedural Malfeasance

On the OWRD website is found **Reservoir Application Procedures and Review.** The process is described unambiguously and is summarized here:

1. Completeness Determination;
2. Initial Review;
3. Public Notice;
4. Proposed Final Order Issued;
5. Public Notice;
6. Final Order Issued.

A Proposed Final Order (PFO) for Application G-18342 was published in the Public Notice of Water Use Requests on August 15, 2017. The PFO states that "*an error was made in the Initial Review as to the proposed use. The applicant indicated on Page 5 [sic] of the application that the proposed use will also include storage. The determinations of the Initial Review should be corrected to reflect the proposed use will also include storage.*"

Following Public Notice (#3.), public comments on the Application and the Initial Review (IR) are allowed. In providing such comments, the public assumes that 1), the application has been found to be complete; 2), that the "determinations of the Initial Review" are based upon an accurate review of the application; and 3), that the Application Procedures and Review will be followed – specifically, that comments submitted will be considered in drafting the PFO.

In proceeding to the PFO stage without disclosing the corrections in "the determinations of the Initial Review" that "should be corrected", the public has been denied an opportunity to comment on a resubmitted (?)(now complete?) application and the (should-have-been-corrected-prior-to-writing-the-PFO) IR.

'Comments' are to be made following publication of the IR; 'protests' are to be made over the substantive details of the PFO (drafted, in part, in response to submitted comments). As a result of the procedural sleight-of-hand in the present case, issues normally raised at the comment stage must now be dealt with at the protest stage. An interested party must pay $810 and file a protest in order to comment on substantive issues that should have been considered in writing the PFO.

I am requesting that this PFO be rescinded, a corrected IR be published, and the statutorily required comment period be allowed.

Discussion

1. On July 15, 2016, HE HE Properties of America filed an application to appropriate groundwater on the property bordering mine to the south, located some 2 miles north of Eagle Point in Jackson County. **Section 5: Water Management,** part A., of the application states that water will be "pumped from well into bulidge-in system" [sic]. In **Section 6: Storage OF Ground Water** in a Reservoir, all questions are answered "N/A". In **Section 7: Use OF Stored Ground Water,** there is no entry for Annual Volume (acre-feet), and the USE OF STORED GROUND WATER and PERIOD OF USE tables are crossed out.

Although a *bulge in system* does not require a water right permit, a reservoir that stores ground water does require the disclosure of information requested in Sections 6 and 7 of the application, which as noted above, was not provided. The caseworker, as quoted above, acknowledges that "an error was made in the IR as to the proposed use". That error being that proposed storage was overlooked and thus the IR was defective.

Responding to that IR, I wrote in my comments "*Applicant told me in August that he will build pond and raise fish using the well water. That pond excavation is far along. Pumping groundwater into a pond in an area of high pan evaporation is a questionable use of water. Does the applicant have or need a permit for such?*" It seems reasonable to conclude that my comments were responsible for the caseworker taking a closer look at the application. The raising of fish would indicate that this reservoir would not involve a temporary storage of water, and thus would not be a 'bulge in system'. However, the bulge-or-not question is not the issue – the issue is: bulge-or-not, the storage of groundwater in a reservoir requires a permit, and therefore the application was incomplete because the required information was not provided in the application.

2. In the **Scanned Documents** section of the **Water Rights Information Query** provided by the OWRD, for Application G-18342, the IR was entered 10/7/2016, and the next (and only) subsequent entry is the PFO, dated 8/15/2017. Thus, while the caseworker states that: *The determinations of the Initial Review should be corrected to reflect the proposed use will also include storage.*", the IR was not corrected (or at least not made public in **Scanned Documents**). Having failed to notice that a reservoir was included as part of the groundwater application, it is understandable that the caseworker concluded that the application was complete. However, upon realizing her error, the caseworker compounded that error by not publishing a corrected IR that would have made it possible for the public to comment on the proposed reservoir. What is the point of a correction if it is not made public?

3. As I have discussed with the Watermaster of District 13 on at least 2 occasions, I have serious substantive issues regarding this reservoir. Among these are concerns about the contamination of groundwater from nitrogen-rich water leaking from the reservoir in the dry season; and concerns that the reservoir will actually be an unpermitted "sump" during the wet season based upon my local knowledge of subsurface flows and the fact that the excavated pit filled with water last winter and spring. These issues were not raised in my comments to the flawed IR because there was no information contained in the application or the IR about a reservoir upon which to comment. I very superficially raised the fish issue based upon what the applicant had said, but from my three conversations with this person, I had serious doubts about his credibility. Furthermore, there was no way to document what he had said for purposes of commenting. And, with Sections 6 and 7 of the application not providing any information, I did not even know if the borrow pit excavated in 2016 is the same site as the "bulidge-in system" [sic] listed in Section 5 (and without access to an amended application, I still do not know).

Conclusion

Comments from the public are allowed according to established rules. As a practical matter, comments are valuable in reducing the potential for future discord by enabling WRD permits to be fine-tuned to local circumstances. In denying my opportunity to comment on an amended application and a ("should be") corrected IR, I am placed in the strange position of potentially protesting the issuance of the PFO itself. The WRD should rescind the PFO and process the subject application correctly according to the **Reservoir Application Procedures and Review.** The consequences of the caseworker's mistakes are being born by me in terms of wasted time in responding to those mistakes. I have more to do than try to clean up a mess not of my own making.

Richard Harrington

Oregon
John A. Kitzhaber, M.D., Governor

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March 1, 2002

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Reference: File G-15618

Dear Applicant:

THIS IS NOT A PERMIT AND IS SUBJECT TO CHANGE AT THE NEXT PHASE OF PROCESSING.

This letter is to inform you of the unfavorable preliminary analysis of your water use permit application and to describe your options. In determining whether a water use permit application may be approved, the Department must consider the factors listed below, all of which must be favorable to the proposed use if it is to be allowed. Based on the information you have supplied, the Water Resources Department has made the following preliminary determinations:

Initial Review Determinations:

1. The proposed use is not prohibited by law or rule.

2. The use of water from two wells in Rogue River basin for irrigation of 35.9 acres is a classified use under OAR 690-515, the Rogue Basin Program.

3. The Department has determined, based upon OAR 690-09, that the proposed groundwater use will not have the potential for substantial interference with the nearest surface water source, namely Hog Creek.

4. The Department has determined, based upon available data, that the use of groundwater from the proposed wells **will not likely be available** in the amounts requested without injury to prior groundwater rights and/or within the capacity of the groundwater resource.

Summary of Allowable Water Use

Because item 4# above is unfavorable, the use of 0.402 cubic foot per second of water from two wells in Rogue River basin for irrigation of 35.9 acres is not allowable, and it appears unlikely that you will be issued a permit. At this time, you must decide whether to proceed or to withdraw your application as described below.

Please reference the application number when sending any correspondence regarding the conclusions of this initial review. Comments received within the comment period will be evaluated at the next phase of the process.

Withdrawal Refunds:

If you choose not to proceed, you may withdraw your application and receive a refund (minus a $50 processing charge per application.) To accomplish this you must notify the Department in writing by **Friday, March 15, 2002**. For your convenience you may use the enclosed "STOP PROCESSING" form.

To Proceed With Your Application:

If you choose to proceed with your application, you do not have to notify the Department. Your application will automatically be placed on the Department's Public Notice to allow others the opportunity to comment. After the comment period the Department will complete a public interest review and issue a proposed final order.

If A Permit Is Issued It Will Likely Include The Following Conditions:

1. Measurement, recording and reporting conditions:

   A. Before water use may begin under this permit, the permittee shall install a meter or other suitable measuring device as approved by the Director. The permittee shall maintain the meter or measuring device in good working order.

   B. The permittee 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.

   C. The Director may require the permittee to keep and maintain a record of the amount (volume) of water used and may require the permittee to report water use on a periodic schedule as established by the Director. In addition, the Director may require the permittee to report general water use information, the periods of water use and the place and nature of use of water under the permit. The Director may provide an opportunity for the permittee to submit alternative reporting procedures for review and approval.

2. Use of water under authority of this permit may be regulated if analysis of data available after the permit is issued discloses that the appropriation will measurably reduce the surface water flows necessary to maintain the free-flowing character of a scenic waterway in quantities necessary for recreation, fish and wildlife in effect as of the priority date of the right or as those quantities may be subsequently reduced.

3. The tentative priority date for this application is SEPTEMBER 28, 2001.

Information obtained from the Department of Environmental Quality (DEQ)indicates that the source of water identified in your application is "Water Quality Limited". That means that there are water quality concerns. DEQ will be looking at information from your application to see if additional conditions or restrictions are needed to protect the water quality situation. One possible outcome is that the Water Resources Department will propose in the proposed final order that your application be denied. You are encouraged to contact Tom Melville, (503) 229-5849 at DEQ to discuss the specifics of your application. Often, this information exchange can allow the water use to occur and at the same time keep the water quality situation from worsening.

If you have any questions:

Questions about the status of your application, processing timelines, or your upcoming Proposed Final Order should be directed to our Water Right Information Group at (503) 378-8455 extension 499. Feel free to call me at (503) 378-8455 extension 266 if you have any questions regarding the contents of this letter. Please have your application number available if you call. Address all other correspondence to: Water Rights Section, Oregon Water Resources Department, 158 12th ST. NE Salem, OR 97310, Fax: (503)378-6203.

Sincerely,

Russell W. Klassen
Initial Reviewer

cc: Regional Manager, Watermaster District 13, Water Availability Section
enclosures: Flow Chart of Water Right Process
Stop Processing Form

G-15618
wab 15-
pou 15-
gw B

APPLICATION FACT SHEET

Mail to: Applicant, Watermaster, District Biologist (ODFW)
If necessary, also mail to : Regional Water quality manager (DEQ), and DOA

Application File Number: G-15618

Applicant: JIM JOHNSON JOHNSON, VIOLET

County: JACKSON

Watermaster: District 13

Priority Date: SEPTEMBER 28, 2001

Source: TWO WELLS IN ROGUE RIVER BASIN

Use: IRRIGATION OF 35.9 ACRES

Quantity: 0.402 CUBIC FOOT PER SECOND

Basin Name & Number: Rogue, #15

Stream Index Reference: Volume 1A ROGUE R MISC

Point of Diversion Location: NENE, SECTION 28, T35S, R1W, W.M.; 162 FEET SOUTH & 312 FEET WEST FROM NE CORNER, SECTION 28 NENE, SECTION 28, T35S, R1W, W.M.; 232 FEET SOUTH & 328 FEET WEST FROM NE CORNER, SECTION 28

Place of Use: NWNW 17.3 ACRES, SECTION 27 NENE 14.7 ACRES NWNE 3.9 ACRES, SECTION 28, TOWNSHIP 35 SOUTH, RANGE 1 WEST, W.M.

14 DAY STOP PROCESSING DEADLINE DATE: Friday, March 15, 2002

PUBLIC NOTICE DATE: Tuesday, March 19, 2002

30 DAY COMMENT DEADLINE DATE: Thursday, April 18, 2002

WATER RESOURCES DEPARTMENT MEMORANDUM

To: Groundwater/Hydrology Oct 17, 2001

From: Doug Woodcock

Subject: GW Application G-15618

Applicant: Jim and Violet Johnson
From: 2 drilled wells in the Rogue Basin
Proposed Use: Irr of 35.9 ac

Seek: 180 gpm

Quad Name: Shady Cove

Well 1 (JACK 54789) 35S/01W-28 NENE Jackson County

162 ft S and 312 ft W of the NE Cor Sec 28 Well is 3500 ft from Hog Creek
Well elev is ~ 1460 ft (NGVD 1929) Hog Cr elevation is ~1360 ft
Well depth is 140 ft w/ a reported SWL of 26 ft (7/25/01)

Well 2 (JACK 54979) 35S/01W-28 NENE Jackson County

232 ft S and 328 ft W of the NE Cor Sec 28 Well is 3600 ft from Hog Creek
Well elev is ~ 1465 ft (NGVD 1929) Hog Cr elevation is ~1360 ft
Well depth is 400 ft w/ a reported SWL of 55 ft (9/4/01)

Evaluation Summary

The proposed use is 180 gpm from two wells at the northern base of Long Mtn. for irrigation of 35.9 acres of pasture. The wells are drilled into various colored "claystone." On the geologic map of the Shady Cove quadrangle the well site is identified as undifferentiated Oligocene and Eocene volcanic and volcanogenic rocks intercalated with Payne Cliffs Formation. The "claystone" probably represent volcanic mudstone and/or tuffaceous deposits.

Well logs in the surrounding section are highly variable in both depth and yield. There is likely a fracture-flow component to the flow system as yields vary from a trace to upwards of 100 gpm. Well deepenings account for about 10% of the well logs in each section, with two exceptions: section 27, where there are 24 well logs and no reported deepenings and section 33 (the section south of the applicant), where deepenings account for 30% of 80 well logs. Sections 28 (applicant) and 33 include Long Mtn., a highland formed by mafic dikes intruded into the volcanogenic rock. The higher percentage of deepenings in section 33 may be the result of section 33 being developed to greater degree than section 28.

The closest water level data available is from two wells 3500 ft west of this application. Two wells under permit G-13649 have annual water level data associated with them. Well 1 is a domestic and irrigation well and had a reported 103 ft water level that dropped to 160 ft upon deepening (Jack 34722, 2667). Subsequent data show the March water level in 2001 was 165 ft. The second well is the primary irrigation well. It was reported to be 74 ft when drilled in Nov '93. A late summer measurement by Ivan Gall, regional hydrogeologist, reported a static measurement of 116 ft (10/1998). Recent March measurements show the well recovers to 66 ft (3/2000) and 70 ft (3/2001) after 5 months of non-use. The permit allows 27 gpm total from both wells.

Ivan Gall and Larry Menteer (watermaster, Jackson Co.) report anecdotal information of water problems around the Long Mtn. area. This appears to be supported by the number of well deepenings in section 33. While the area around this application is rural, there is at least one neighbor near the applicant, just across the north line into section 21. The well for that property may be JACK 2776, a reported 6.5 gpm well drilled in 1978.

Given the request is for such a large quantity of water out of material that commonly does not provide a long-term stable supply, it raises the specter of both well interference and whether the aquifer can sustain the use. It is unlikely that this is porous flow from these fine-grained sediments, and fracture-dominated flow is notorious for large initial yields that deplete fractures and result in deep water levels with little Q.

With regard to interference with surface water the nearest source is a lateral of the Eagle Point ID. Beyond that ditch is Hog Creek at 3500 ft away. It is unlikely that surface water interference is an issue

Recommendation:
No potential for substantial interference exists with this use. However, well interference is a potential problem with this application. Additional information that would be useful is field location of nearby wells w/ log-id ties, and an aquifer test with observation wells.

References: GRID WRD database; USGS topographic maps: Shady Cove and Eagle Point, Or 7.5 minute map; 1983; Geologic and Mineral Resources Map of the Shady Cove Quadrangle, Jackson County, Oregon, GMS-52, DOGAMI, 1992, Jackson County Assessment Search http://www.smartmap.org/assessor/search/default.cfm; OWRD permit conditions database.

WATER RIGHT SOLUTIONS, LLC
2779 Camp Baker Road
Medford, OR 97501
541-512-1159
Fax 541-512-1169

March 19, 2002

Mr. Jim Johnson
PO Box 1186
Eagle Point, Oregon 97524

Subject: water right filing

Dear Jim;

I discussed you filing with Mr. Doug Woodcock of the Water Resources Department today. The reasons for the unfavorable finding in the "initial review" are

1) There have been well problems in the past with the geologic formation that your wells are located in.
2) There are neighboring wells close by.
3) There is evidence of well decline in this area.

Without supporting information the Water Resources Department will only allow the exempt uses (which is household use and irrigation of ½ acre yard and garden).

The information needed to proceed with the filing is

1) Information on adjacent well (location and well logs)
2) Pump test of one of your wells to determine the affect on neighboring wells.

The test pump procedure is to get access to the neighboring well. Pump your well for up to eight hours. Measure the draw down in your well and the neighboring well during the pump test. Then after the test pumping is done continue to measure the water level in the neighboring wells to determine the rate of recovery.

Once the Water Resources Department has this information they will determine how much water can be withdrawn without harm to the neighboring wells. There are a couple of companies that do this kind of testing locally. They are Ferrero Geologic and Enviro Logic.

At this point you have two options. One is to proceed with the test to obtain as much water right as they will grant (the amount granted could be greatly reduced from you application). The other is to withdraw the application and get you filing fee (less $50) back.

Let me know if I can be of further service to you.

Sincerely,

Hollie Cannon

Oregon Water Resources Department

Water Right Services Division

Water Right Application G-18342 in the name of HE HE Properties Of America	)))	PROPOSED FINAL ORDER

Summary: The Department proposes to issue an order approving Application G-18342, consistent with the attached draft permit.

Authority

The application is being processed in accordance with Oregon Revised Statute 537.615 through 537.628, and 390.826, and Oregon Administrative Rule Chapter 690, Divisions 5, 8, 9, 33, 300, 310, 400, 410, 502 and Rogue Basin Program 690-515. These statutes and rules can be viewed on the Oregon Water Resources website: http://www.oregon.gov/owrd/pages/law/index.aspx

The Department's main page is http://www.oregon.gov/OWRD/pages/index.aspx

The Department shall presume that a proposed groundwater use will ensure the preservation of the public welfare, safety and health as described in ORS 537.525 if:

(a) The proposed use is allowed in the applicable basin program established pursuant to ORS 536.300 and 536.340 or given a preference under ORS 536.310(12);

(b) Water is available;

(c) The proposed use will not injure other water rights; and

(d) The proposed use complies with the rules of the Commission. 537.621(2); 690-310-0150(2)(b)

All four criteria must be met for a proposed use to be presumed to ensure the preservation of the public welfare, safety and health. When the criteria are met and the presumption is established the Department must further evaluate the proposed use, any comments received information available in its files or received from other interested agencies and any other available information to determine whether the presumption is overcome. 690-310-0140.

If the Department determines that the presumption is established and not overcome the Department shall issue a proposed final order recommending issuance of the permit subject to any appropriate modifications or conditions.

FINDINGS OF FACT

Application History

1. On July 15, 2016, HE HE Properties of America filed a complete application for the following water use:
   Amount of Water: 0.167 cubic foot per second (CFS)
   Use of Water: nursery use on 30.0 acres
   County: Jackson County
   Location: within Sections 27 and 28, Township 35 South, Range 1 West, W.M
   Source of Water: Well 1 in Hog Creek Basin

2. On October 7, 2016, the Department mailed the applicant notice of its Initial Review, determining that "**The appropriation of 0.167 CFS of water from Well 1 in Hog Creek Basin for year-round nursery use on 30.0 acres is allowable.**". The applicant did not notify the Department to stop processing the application within 14 days of that date.

3. On October 11, 2016, the Department gave public notice of the application in its weekly notice. The public notice included a request for comments, and information for interested persons about obtaining future notices and a copy of the Proposed Final Order.

4. The Department has determined an error was made in the Initial Review as to the proposed use. The applicant indicated on Page 5 of the application that the proposed use will also include storage. The determinations of the Initial Review should be corrected to reflect the proposed use will include storage. Additional conditions have been added to the draft permit.

5. Finding of Fact #3 in the Initial Review was in error and should read as "Uses included in nursery use are fully included in irrigation and agriculture uses, both of which are allowed under the Rogue Basin Program (OAR 690-515). 537.621(3)(b); 690-310-0150(2)(b)", as seen below in #6.

Presumption Criteria (a) Consistency with Basin Program

6. Uses included in nursery use are fully included in irrigation and agriculture uses, both of which are allowed under the Rogue Basin Program (OAR 690-515). 537.621(3)(b); 690-310-0150(2)(b).

7. The proposed groundwater use is not within a designated critical groundwater area. 537.620(4)(a), 537.621(3)(a); 690-310-0150(2)(a).

Presumption Criteria (b) Water Availability

8. An assessment of groundwater availability has been completed by the Groundwater/Hydrology section. A copy of this assessment is in the file. Groundwater will likely be available within the capacity of the resource, and if properly conditioned (and if authorized), the proposed use of groundwater will avoid injury to existing groundwater rights. 537.621(3)(c); 690-310-0150(2)(c).

Presumption Criteria (c) Injury Determination

9. The proposed use will not injure other water rights. 537.621(3)(d); 690-310-0150(2)(e).

Presumption Criteria (d) Whether the use complies with rules of the Commission

10. Documentation has been submitted from the relevant land-use planning jurisdiction that indicates the proposed use is allowed outright. 537.621(3)(b); 690-310-0150(2)(b).

11. The proposed use complies with rules of the Water Resources Commission not otherwise described above.

Determination of Presumption that a proposed groundwater use will ensure the preservation of the public welfare, safety and health

12. Based on the review of the presumption criteria (a)-(d) above, the presumption has been established. 537.621(3)(g); 690-310-0150(2)(g).

Further evaluation of the proposed use

13. Comments were received separately from Richard Harrington and Michelle Colby Kielman both expressing concern for senior water right users water availability and interference with domestic exempt wells, by the close of the comment period. 690-310-0140(3).

14. Information available in Department files, received from other interested agencies, and other available information does not provide a preponderance of evidence that the proposed use would not ensure the preservation of the public welfare, safety, and health under ORS 537.525. 690-310-0140(3).

Other Criteria and Requirements

15. The proposed use is located above the Rogue Scenic Waterways, as designated under Oregon Revised Statute 390.826. The Department has determined that there is not a preponderance of evidence that the proposed use of groundwater will measurably reduce the surface water flows necessary to maintain the free-flowing character of a scenic waterway in quantities necessary for recreation, fish and wildlife. 537.620(4)(a), 537.621(3)(a); 690-310-0150(2)(a)

16. In accordance with Div. 33 (Additional Public Interest Standards for New Appropriations) an interagency team reviewed the proposed use for potential adverse impacts on sensitive, threatened and endangered fish populations. This team consisted of representatives from the Oregon Departments of Water Resources (WRD), Environmental Quality (DEQ), Fish and Wildlife (ODFW), and Agriculture. WRD and ODFW representatives included both technical and field staff. The interagency team did not recommend that any additional conditions of use be imposed on this application. 690-033-0330

17. The amount of water requested, 0.167 CFS, is necessary for the proposed use. 537.621(3)(c); 690-310-0150(2)(b)

18. The applicant proposed to apply water when needed, and use the most efficient method of water application for the crop being irrigated (drip irrigation). These measures are adequate at this time. 690-310-0150(2)(j)

19. The applicant did not propose any measures to measure the amount of water diverted, prevent damage to aquatic life and riparian habitat, prevent discharge of contaminated water to a surface stream and to prevent damage to public uses of any affected surface waters. The lack of proposed measures is inadequate. Measures addressing these requirements will be conditions of water use in the permit. 690-310-0150(2)(j)

CONCLUSIONS OF LAW

1. The proposed use would ensure the preservation of the public welfare, safety and health as described in ORS 537.525.

When issuing permits, ORS 537.628(1) authorizes the Department to include limitations and conditions which have been determined necessary to protect the public welfare, safety, and health. The attached draft permit is conditioned accordingly.

PROPOSED ORDER

The Department recommends approval of Application G-18342, as amended, and issuance of a permit consistent with the attached draft permit.

DATED August 15, 2017

E. Timothy Wallin, Water Rights Program Manager
for Thomas M. Byler, Director

Protests

Under the provisions of ORS 537.153(7) (for surface water) or ORS 537.621(8) (for groundwater), you can protest this Proposed Final Order. Protests must be received in the Water Resources Department no later than **Friday, September 29, 2017**. Protests must be in writing, and must include the following:

- Your name, address, and telephone number;
- A description of your interest in the Proposed Final Order, and, if you claim to represent the public interest, a precise statement of the public interest represented;
- A detailed description of how the action proposed in the Proposed Final Order would impair or be detrimental to your interest;
- A detailed description of how the Proposed Final Order is in error or deficient, and how to correct the alleged error or deficiency;
- Any citation of legal authority to support your protest, if known;
- To affect the department's determination that the proposed use in this application will, or will not, ensure the preservation of the public welfare, safety and health as described in ORS 537.525, ORS 537.621(2)(b) requires that a protest demonstrate, by a preponderance of evidence any of the following: (a) One or more of the criteria for establishing the presumption are, or are not, satisfied; or (b) The specific aspect of the public welfare, safety and health under ORS 537.525 that would be impaired or detrimentally affected, and specifically how the identified aspect of the public welfare, safety and health under ORS 537.525 would be impaired or be adversely affected;
- If you are the applicant, the protest fee of $410 required by ORS 536.050; and
- If you are not the applicant, the protest fee of $810 required by ORS 536.050 and proof of service of the protest upon the applicant.
- If you are the applicant, a statement of whether or not you are requesting a contested case hearing.

Requests for Standing

Under the provisions of ORS 537.153(7) (for surface water) or ORS 537.621(8) (for groundwater), persons other than the applicant who support a Proposed Final Order can request standing for purposes of participating in any contested case proceeding on the Proposed Final Order or for judicial review of a Final Order.

Requests for standing must be received in the Water Resources Department no later than **Friday, September 29, 2017**. 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 Proposed Final Order as issued;

- A detailed statement of how the requester would be harmed if the Proposed Final Order is modified; and

- A standing fee of $230. If a hearing is scheduled, an additional fee of $580 must be submitted along with a petition for party status.

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 submitted and either:

- upon review of the issues, the director finds that there are significant disputes related to the proposed use of water, or

- the applicant requests a contested case hearing within 30 days after the close of the protest period.

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 137-003-0555, an agency representative may represent a partnership, corporation, association, governmental subdivision or public or private organization 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 Service Members: Active duty service members have a right to stay proceedings under the federal Service Members Civil Relief Act. 50 U.S.C. App. §§501-597b. You may contact the Oregon State Bar or the Oregon Military Department for more information. The toll-free telephone number for the Oregon State Bar is: 1 (800) 452-8260. The toll-free telephone number of the Oregon Military Department is: 1 (800) 452-7500. The Internet address for the United States Armed Forces Legal Assistance Legal Services Locator website is: http://legalassistance.law.af.mil

This document was prepared by Lisa Graham. If you have any questions about any of the statements contained in this document I can be reached at 503-986-0808 or Elisabeth.A.Graham@Oregon.gov.

If you have questions about how to file a protest or a request for standing, please refer to the respective sections in this Proposed Final Order entitled "Protests" and "Requests for Standing". If you have previously filed a protest and want to know its status, please contact Patricia McCarty at 503-986-0820.

If you have other questions about the Department or any of its programs please contact our Customer Service Group at 503-986-0801. Address all other correspondence to:

Water Rights Section, Oregon Water Resources Department, 725 Summer St NE Ste A, Salem OR 97301-1266, Fax: 503-986-0901.

STATE OF OREGON

COUNTY OF JACKSON

DRAFT PERMIT TO APPROPRIATE THE PUBLIC WATERS

THIS DRAFT PERMIT IS HEREBY ISSUED TO

HE HE PROPERTIES OF AMERICA
544 N HEIGHTS DR
EAGLE POINT OR 97524

The specific limits and conditions of the use are listed below.

APPLICATION FILE NUMBER: G-18342

SOURCE OF WATER: WELL 1 IN HOG CREEK BASIN

PURPOSE OR USE AND MAXIMUM RATE:

0.167 CUBIC FOOT PER SECOND FOR NURSERY USE ON 30.0 ACRES

35.0 ACRE FEET FOR STORAGE FOR NURSERY USE

PERIOD OF USE: JANUARY 1 THROUGH DECEMBER 31

DATE OF PRIORITY: JULY 15, 2016

WELL LOCATION:

Twp	Rng	Mer	Sec	Q-Q	Measured Distances
35 S	1 W	WM	27	SW NW	1527 FEET SOUTH AND 392 FEET EAST FROM NW CORNER, SECTION 27

The amount of water used for nursery use under this right, together with the amount secured under any other right existing for the same lands, is limited to 0.15 cubic foot per second per acre and 5.0 acre feet per acre per year. For irrigation of containerized nursery plants, the amount of water diverted under this right, together with the amount secured under any other right existing for the same lands, is limited to ONE-FORTIETH of one cubic foot per second and 5.0 acre feet per acre per year. For irrigation of in-ground nursery plants, the amount of water diverted under this right, together with the amount secured under any other right existing for the same lands, is limited to ONE-EIGHTIETH of one cubic foot per second and 2.5 acre feet per acre per year. The use of water for nursery use may be made at any time, during the period of allowed use specified above, that the use is beneficial. For irrigation of any other crop, the amount of water diverted under this right, together with the amount secured under any other right existing for the same lands, is limited to ONE-EIGHTIETH of one cubic foot per second and 2.5 acre feet per acre during the irrigation season of each year.

THE PLACE OF USE IS LOCATED AS FOLLOWS:

Twp	Rng	Mer	Sec	Q-Q	Acres
35 S	1 W	WM	27	SW NW	15.00
35 S	1 W	WM	28	SE NE	15.00

1. **Measurement Devices, and Recording/Reporting of Annual Water Use Conditions:**

   A. Before water use may begin under this permit, the permittee shall install a totalizing flow meter at each point of appropriation. The permittee shall maintain the device in good working order.

   B. The permittee shall allow the watermaster access to the device; provided however, where any device is located within a private structure, the watermaster shall request access upon reasonable notice.

   C. The permittee shall keep a complete record of the volume of water used each month, and shall submit an annual report which includes the recorded water-use measurements to the Department annually, or more frequently as may be required by the Director. Further, the Director may require the permittee to report general water-use information, including the place and nature of use of water under the permit.

   D. The Director may provide an opportunity for the permittee to submit alternative measuring and reporting procedures for review and approval.

2. **Static Water Level Conditions:**

   To monitor the effect of water use from the well(s) authorized under this permit, the Department requires the water user to obtain, from a qualified individual (see below), and report annual static water level measurements. The static water level shall be measured in the month of March. Reports shall be submitted to the Department within 30 days of measurement.

   Measurements must be made according to the following schedule:

   Before Use of Water Takes Place
   Initial and Annual Measurements
   The Department requires the permittee to report an initial water level measurement in the month specified above once well construction is complete and annually thereafter until use of water begins; and

   After Use of Water has Begun
   Seven Consecutive Annual Measurements
   Following the first year of water use, the user shall report seven consecutive annual static water level measurements. The first of these seven annual measurements will establish the reference level against which future annual measurements will be compared. Based on an analysis of the data collected, the Director may require the user to obtain and report additional annual static water level measurements beyond the seven year minimum reporting period. The additional measurements may

be required in a different month. If the measurement requirement is stopped, the Director may restart it at any time.

All measurements shall be made by a certified water rights examiner, registered professional geologist, registered professional engineer, licensed well constructor or pump installer licensed by the Construction Contractors Board and be submitted to the Department on forms provided by the Department. The Department requires the individual performing the measurement to:

A. Identify each well with its associated measurement; and

B. Measure and report water levels to the nearest tenth of a foot as depth-to-water below ground surface; and

C. Specify the method used to obtain each well measurement; and

D. Certify the accuracy of all measurements and calculations reported to the Department.

The water user shall discontinue use of, or reduce the rate or volume of withdrawal from, the well(s) if any of the following events occur:

A. Annual water level measurements reveal an average water level decline of three or more feet per year for five consecutive years; or

B. Annual water level measurements reveal a water level decline of 15 or more feet in fewer than five consecutive years; or

C. Annual water level measurements reveal a water level decline of 25 or more feet; or

D. Hydraulic interference leads to a decline of 25 or more feet in any neighboring well with senior priority.

The period of non-use or restricted use shall continue until the water level rises above the decline level which triggered the action or until the Department determines, based on the permittee's and/or the Department's data and analysis, that no action is necessary because the aquifer in question can sustain the observed declines without adversely impacting the resource or senior water rights. The water user shall in no instance allow excessive decline, as defined in Commission rules, to occur within the aquifer as a result of use under this permit. If more than one well is involved, the water user may submit an alternative measurement and reporting plan for review and approval by the Department.

3. **Scenic Water Way Condition:**

Use of water under authority of this permit may be regulated if analysis of data available after the permit is issued discloses that the appropriation will measurably reduce the surface water flows necessary to maintain the free-flowing character of a scenic waterway in quantities necessary for recreation, fish and wildlife in effect as of the priority date of the right or as those quantities may be subsequently reduced.

4. **Groundwater Condition:**

Groundwater production shall be only from a single aquifer in the bedrock groundwater reservoir.

5. **Storage Conditions:**

A berm that excludes overland flow of surface water must be installed and maintained around the reservoir.

If there is an outlet for the storage component:

a. **Prior to stocking with fish**, you may be required to install a fish screen at the outlet to meet Oregon Department of Fish and Wildlife specifications for adequate protection of aquatic life.

STANDARD CONDITIONS

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

If the number, location, source, or construction of any well deviates from that proposed in the permit application or required by permit conditions, this permit may be subject to cancellation, unless the Department authorizes the change in writing.

If substantial interference with surface water or a senior water right occurs due to withdrawal of water from any well listed on this permit, 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 constructed and maintained in accordance with the General Standards for the Construction and Maintenance of Water Supply Wells in Oregon. The works shall be equipped with a usable access port adequate to determine water-level elevation in the well at all times.

If the riparian area is disturbed in the process of developing a point of appropriation, the permittee shall be responsible for restoration and enhancement of such riparian area in accordance with ODFW's Fish and Wildlife Habitat Mitigation Policy OAR 635-415. For purposes of mitigation, the ODFW Fish and Wildlife Habitat Mitigation Goals and Standards, OAR 635-415, shall be followed.

The use may be restricted if the quality of downstream waters decreases to the point that those waters no longer meet state or federal water quality standards due to reduced flows.

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.

Prior to receiving a certificate of water right, the permit holder shall submit to the Water Resources Department the results of a pump test meeting the Department's standards for each point of appropriation (well), unless an exemption has been obtained in writing under OAR 690-217. The Director may require water-level or pump-test data every ten years thereafter.

This permit 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.

Construction of the well shall be made within five years of the date of permit issuance. The deadline to begin construction may not be extended. This permit is subject to cancellation proceedings if the begin construction deadline is missed.

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Complete application of the water shall be made within five years of the date of permit issuance. If beneficial use of permitted water has not been made before this date, the permittee may submit an application for extension of time, which may be approved based upon the merit of the application.

Within one year after making beneficial use of water, the permittee shall submit a claim of beneficial use, which includes a map and report, prepared by a Certified Water Rights Examiner.

Issued

DRAFT - THIS IS NOT A PERMIT

E. Timothy Wallin, Water Rights Program Manager
for Thomas M. Byler, Director

Mailing List for PFO Copies

Application G-18342

PFO Date August 8, 2017

Original mailed via CERTIFIED MAIL to applicant:

HE HE PROPERTIES OF AMERICA
544 N HEIGHTS DR
EAGLE POINT OR 97524

SENT VIA EMAIL:
1. WRD - Shavon Haynes - # 13
2. Agent - Mark Wiest: mark_wiest@yahoo.com

Copies sent to:

1. WRD - File # G-18342
2. WRD - Hydrographics

Copies Mailed

By: SP

(SUPPORT STAFF)

on: 8.15.17

(DATE)

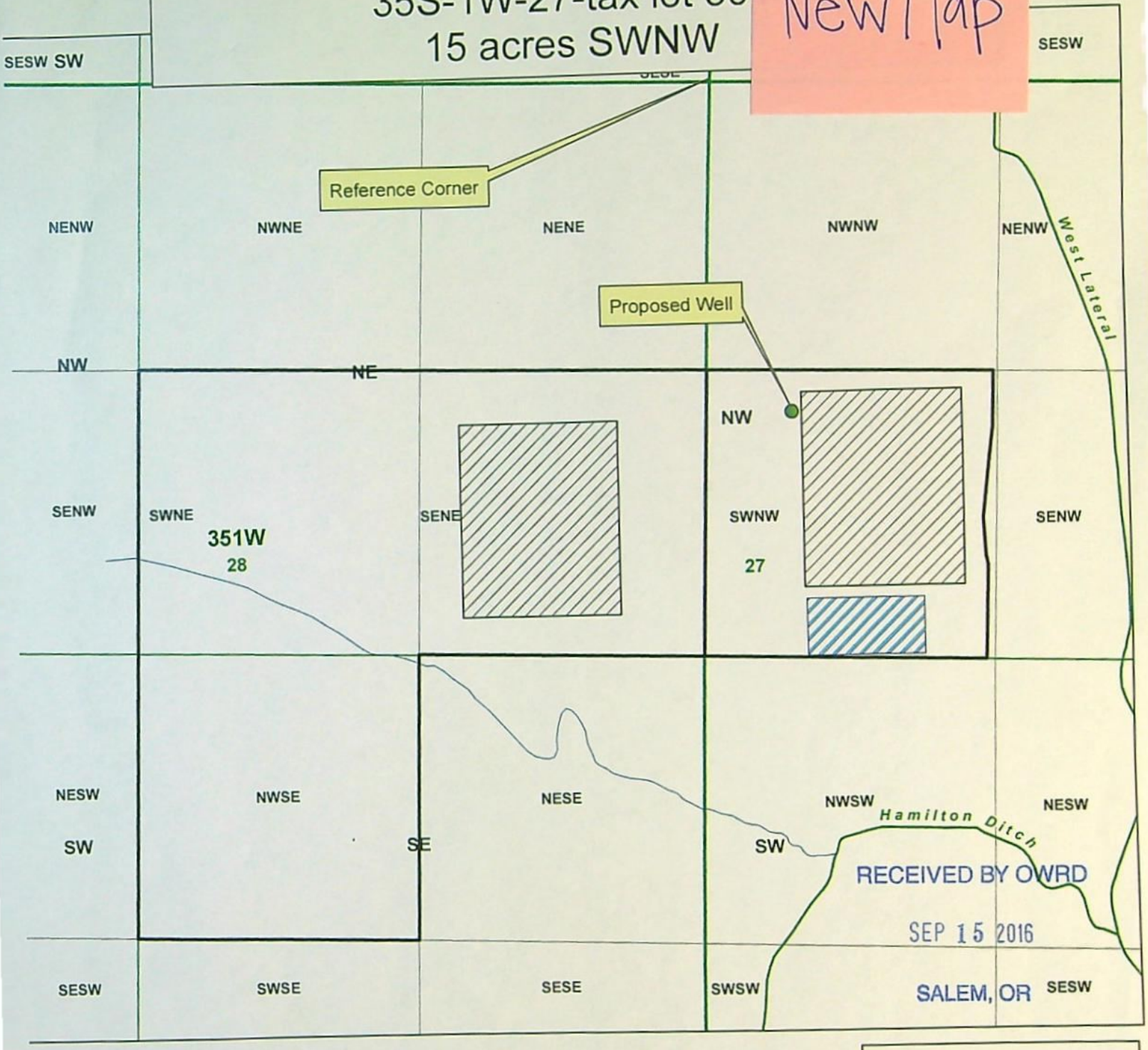
Protest/

Standing Dates checked

CASEWORKER: Lisa Graham

Groundwater Application Map for Nursery Use and Storage in
35S-1W-28 -tax lot 300
15 acres SENE
35S-1W-27-tax lot 30
15 acres SWNW

New Map



RECEIVED BY OWRD

SEP 15 2016

SALEM, OR

Legend

- TL 300/301
- Storage
- Proposed Well Location
- POU of Nursery
- Townships
- Sections
- Quarter Sections
- Quarter Quarter Sections

Proposed well is 1527 ft S and 392 ft E from NW Corner Section 27

Location of Reservoir is 2500 ft South and 811 ft East from NW Corner of Section 27

0 125 250 500 750 1,000 Feet

N

1 inch = 632 feet

JACKSON COUNTY
WATERMASTER

Prepared by Shavon Haynes

This map is based on a digital database compiled by Jackson County from a variety of sources. Jackson County cannot accept responsibility for errors, omissions, or positional accuracy. There are no warranties, expressed or implied.

Date: 09/12/2016; 35-1w-28- tl 300_35-1w-28-tl 301.mxd; haynessl

G-18342

ENRIGHT Diana M * WRD

From: ENRIGHT Diana M * WRD
Sent: Thursday, September 14, 2017 11:00 AM
To: 'Mac mini'
Subject: RE: WRIS Posting

Dear Mr. Harrington:

I have checked the hard copy file for Application G-18342 and spoken with our IT manager (who administers the website) about when documents were posted in WRIS. Please note that we do not post all the documents found in the hard copy files to WRIS. You can always submit a public records request for all the file documents.

The official record is the one with the date stamp in the hard copy water right file, not the date column in WRIS.

The map document link for G-18342 in WRIS was last updated on August 24, 2017.

Thank you.
Diana

Diana Enright
Public Information | Director's Office
Oregon Water Resources Department
725 Summer St. NE, Suite A
Salem, OR 97301
(503) 986-0874

-----Original Message-----
From: Mac mini [mailto:ur1im2@gmail.com]
Sent: Tuesday, September 12, 2017 1:07 PM
To: ENRIGHT Diana M * WRD
Subject: WRIS Posting

Hi. I am seeking information on the Scanned Documents for Application G-18342 found in the WRIS, being told by the phone receptionist that you are the person administering that web site.
Specifically, the date of the Application and Map documents are shown as having been entered on 7/15/2016, yet amended versions were date stamped Sep 15, 2016, but only very recently posted. Inasmuch as the date of this posting may have legal consequences, please document for me the actual date of posting.
Thank you, Richard Harrington

Record creation Date

document_title	document_date	last_updt_date	last_updt_userid	rec_creation_date	rec_creation_userid
File Folder	7/15/2016	7/19/2016 11:32	WRD\phillish	7/19/2016 11:32	WRD\phillish
Application Checklist and Receipt	7/15/2016	7/19/2016 11:34	WRD\phillish	7/19/2016 11:34	WRD\phillish
Application	7/15/2016	8/24/2017 16:13	WRD\phillish	7/19/2016 11:37	WRD\phillish
Map	7/15/2016	8/24/2017 16:09	WRD\phillish	7/19/2016 11:38	WRD\phillish
GW Review	9/7/2016	10/6/2016 12:38	WRD\phillish	9/7/2016 16:15	WRD\phillish
IR	10/7/2016	10/6/2016 12:38	WRD\phillish	10/6/2016 12:38	WRD\phillish
PFO	8/15/2017	9/11/2017 15:02	WRD\phillish	8/14/2017 10:06	WRD\phillish

You can see the map [redacted] Record was create 7/19/2016

and then updated 8/24/2017

Request for Recision of Defective Proposed Final Order for Application G-18342

Procedural Malfeasance

On the OWRD website is found **Reservoir Application Procedures and Review.** The process is described unambiguously and is summarized here:

1. Completeness Determination;
2. Initial Review;
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5. Public Notice;
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A Proposed Final Order (PFO) for Application G-18342 was published in the Public Notice of Water Use Requests on August 15, 2017. The PFO states that "*an error was made in the Initial Review as to the proposed use. The applicant indicated on Page 5 [sic] of the application that the proposed use will also include storage. The determinations of the Initial Review should be corrected to reflect the proposed use will also include storage.*"

Following Public Notice (#3.), public comments on the Application and the Initial Review (IR) are allowed. In providing such comments, the public assumes that 1), the application has been found to be complete; 2), that the "determinations of the Initial Review" are based upon an accurate review of the application; and 3), that the Application Procedures and Review will be followed—specifically, that comments submitted will be considered in drafting the PFO.

In proceeding to the PFO stage without disclosing the corrections in "the determinations of the Initial Review" that "should be corrected", the public has been denied an opportunity to comment on a resubmitted (?)(now complete?) application and the (should-have-been-corrected-prior-to-writing-the-PFO) IR.

'Comments' are to be made following publication of the IR; 'protests' are to be made over the substantive details of the PFO (drafted, in part, in response to submitted comments). As a result of the procedural sleight-of-hand in the present case, issues normally raised at the comment stage must now be dealt with at the protest stage. An interested party must pay $810 and file a protest in order to comment on substantive issues that should have been considered in writing the PFO.

I am requesting that this PFO be rescinded, a corrected IR be published, and the statutorily required comment period be allowed.

Discussion

1. On July 15, 2016, HE HE Properties of America filed an application to appropriate groundwater on the property bordering mine to the south, located some 2 miles north of Eagle Point in Jackson County. **Section 5: Water Management**, part A., of the application states that water will be "pumped from well into buldge-in system" [sic]. In **Section 6: Storage OF Ground Water** in a Reservoir, all questions are answered "N/A". In **Section 7: Use OF Stored Ground Water**, there is no entry for Annual Volume (acre-feet), and the USE OF STORED GROUND WATER and PERIOD OF USE tables are crossed out.

Although a *bulge in system* does not require a water right permit, a reservoir that stores ground water does require the disclosure of information requested in Sections 6 and 7 of the application, which as noted above, was not provided. The caseworker, as quoted above, acknowledges that "an error was made in the IR as to the proposed use". That error being that proposed storage was overlooked and thus the IR was defective.

Responding to that IR, I wrote in my comments "*Applicant told me in August that he will build pond and raise fish using the well water. That pond excavation is far along. Pumping groundwater into a pond in an area of high pan evaporation is a questionable use of water. Does the applicant have or need a permit for such?*" It seems reasonable to conclude that my comments were responsible for the caseworker taking a closer look at the application. The raising of fish would indicate that this reservoir would not involve a temporary storage of water, and thus would not be a 'bulge in system'. However, the bulge-or-not question is not the issue—the issue is: bulge-or-not, the storage of groundwater in a reservoir requires a permit, and therefore the application was incomplete because the required information was not provided in the application.

2. In the **Scanned Documents** section of the **Water Rights Information Query** provided by the OWRD, for Application G-18342, the IR was entered 10/7/2016, and the next (and only) subsequent entry is the PFO, dated 8/15/2017. Thus, while the caseworker states that: *The determinations of the Initial Review should be corrected to reflect the proposed use will also include storage.*", the IR was not corrected (or at least not made public in **Scanned Documents**). Having failed to notice that a reservoir was included as part of the groundwater application, it is understandable that the caseworker concluded that the application was complete. However, upon realizing her error, the caseworker compounded that error by not publishing a corrected IR that would have made it possible for the public to comment on the proposed reservoir. What is the point of a correction if it is not made public?

3. As I have discussed with the Watermaster of District 13 on at least 2 occasions, I have serious substantive issues regarding this reservoir. Among these are concerns about the contamination of groundwater from nitrogen-rich water leaking from the reservoir in the dry season; and concerns that the reservoir will actually be an unpermitted "sump" during the wet season based upon my local knowledge of subsurface flows and the fact that the excavated pit filled with water last winter and spring. These issues were not raised in my comments to the flawed IR because there was no information contained in the application or the IR about a reservoir upon which to comment. I very superficially raised the fish issue based upon what the applicant had said, but from my three conversations with this person, I had serious doubts about his credibility. Furthermore, there was no way to document what he had said for purposes of commenting. And, with Sections 6 and 7 of the application not providing any information, I did not even know if the borrow pit excavated in 2016 is the same site as the "buldge-in system" [sic] listed in Section 5 (and without access to an amended application, I still do not know).

Conclusion

Comments from the public are allowed according to established rules. As a practical matter, comments are valuable in reducing the potential for future discord by enabling WRD permits to be fine-tuned to local circumstances. In denying my opportunity to comment on an amended application and a ("should be") corrected IR, I am placed in the strange position of potentially protesting the issuance of the PFO itself. The WRD should rescind the PFO and process the subject application correctly according to the **Reservoir Application Procedures and Review.** The consequences of the caseworker's mistakes are being born by me in terms of wasted time in responding to those mistakes. I have more to do than try to clean up a mess not of my own making.

Richard Harrington

GRAHAM Elisabeth A * WRD

From: HAYNES Shavon L * WRD
Sent: Tuesday, September 12, 2017 9:53 AM
To: GRAHAM Elisabeth A * WRD
Cc: THOMA Michael J * WRD
Subject: Fwd: DEQ comments for G-18342 - He He Properties of America

Lisa,

I am forwarding DEQ comments regarding G-18342. Does this work?

Shavon

Sent from my iPhone

Begin forwarded message:

> **From:** MEYERS Bill <bill.meyers@state.or.us>
> **Date:** September 11, 2017 at 2:57:50 PM PDT
> **To:** 'HAYNES Shavon L * WRD' <Shavon.L.Haynes@oregon.gov>
> **Cc:** MEYERS Bill <bill.meyers@state.or.us>, TUGAW Heather <heather.tugaw@state.or.us>
> **Subject: DEQ comments for G-18342 - He He Properties of America**
>
> Shavon – here are the DEQ comments related to our discussion with the applicant at the He He Properties of America site on 9/7/17. Thanks to you and Mike for meeting on site – that was really helpful.
>
> Application File Number G-18342. DEQ Comments: Ensure that there is no outflow of water from the proposed pond. If the pond is to be used for nutrient enrichment via aquaculture the pond should be lined to prevent water losses and potential impacts to ground water.

Bill Meyers | Rogue Basin Coordinator | Oregon Department of Environmental Quality |
221 Stewart Avenue, Suite 201| Medford , Oregon 97501
☎: 541-776-6272 | FAX: 541-776-6262

GRAHAM Elisabeth A * WRD

From: Richard Harrington <richard.w.harrington@att.net>
Sent: Tuesday, August 29, 2017 3:30 PM
To: FRENCH Dwight W * WRD
Cc: WALLIN Timothy * WRD; GRAHAM Elisabeth A * WRD
Subject: Application G-18342 Irregularities
Attachments: Recision Request.pdf

Attached is a request to take corrective action on a Proposed Final Order that should not have been published. Whomever is in the position of responsibility please respond in a timely fashion.

Thank You, Richard Harrington

Request for Recision of Defective Proposed Final Order for Application G-18342

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Richard Harrington

GRAHAM Elisabeth A * WRD

From: WALLIN Timothy * WRD <Timothy.Wallin@oregon.gov>
Sent: Wednesday, August 23, 2017 5:12 PM
To: TUGAW Heather
Cc: 'elisabeth.a.graham@wrd.state.or.us'
Subject: RE: G - 18342

Heather – it means "… , further limited to …", but to your point it should actually *say* that. The first is the *limit* expressed as an instantaneous rate (volume per unit time per acre, whereas the second is the *duty* expressed in units of volume per acre per year.

I need to compare notes with Lisa on the other questions.

Tim Wallin | Water Rights Program Manager | Oregon Water Resources Department
725 Summer St NE Suite A Salem OR 97301
voice: 503.986.0891 | fax: 503.986.0901 | www.wrd.state.or.us

---

From: TUGAW Heather [mailto:heather.tugaw@state.or.us]
Sent: Wednesday, August 23, 2017 5:00 PM
To: 'elisabeth.a.graham@wrd.state.or.us'
Cc: WALLIN Timothy * WRD
Subject: RE: G - 18342

Hello again,

Can you also explain the water limitations listed in the draft permit?

Example: "..is limited to ONE-FORTIETH of one cubic foot per second and 5.0 acre feet per acre per year."

My coworker and I are in disagreement if this is an **and** statement or an **or** statement. Does the applicant get the CFS and acre feet?

Thanks,
Heather

From: TUGAW Heather
Sent: Wednesday, August 23, 2017 4:40 PM
To: 'elisabeth.a.graham@wrd.state.or.us' <elisabeth.a.graham@wrd.state.or.us>
Cc: WALLIN Timothy * WRD <Timothy.Wallin@state.or.us>
Subject: G - 18342

Good afternoon Elisabeth,

We received a water quality complaint regarding application G-18342. Our Basin Coordinator reviewed the application, PFO, and draft permit and saw two issues that I would like to work with you to address.
http://apps.wrd.state.or.us/apps/wr/wrinfo/wr_details.aspx?snp_id=188735

- The use was too small to trigger PSI, so the Division 33 review was not triggered. However, # 16 of the PFO states that the IRT did not recommend any additional conditions. This is not accurate because the IRT was never convened.
- The application did not include any information about storage, but the draft permit includes a Storage Condition. Does OWRD have a storage application? What were the conditions based on?

Thank you,
Heather Tugaw

Heather Tugaw | Integrated Water Resources Specialist | Oregon Department of Environmental Quality | 221 Stewart Ave, Suite 201 | Medford, OR 97501 | 541-776-6091 | tugaw.heather@deq.state.or.us

I discussed you[r] filing with Mr. Doug Woodcock of the Water Resources Department today. The reasons for the unfavorable finding in the "initial review" are
1) There have been well problems in the past with the geologic formation that your wells are located in.
2) There are neighboring wells close by.
3) There is evidence of well decline in the area.

In doing a **Water Rights Information Query** for G-15618, the **File Folder Location** indicates that the file has been "destroyed". However, the Initial Review, the PFO, and the FO were copied and mailed to me in November of 2016 by Sarah Henderson, so "destroyed" is not totally accurate. She explained that some records had inadvertently been thrown out, among which were parts of the file for G-15618 . I am hoping that you might have record resources of which I am unaware.

Some 15 years and many applications later, it would be remarkable if you have any memory of this application. I need to ask because although the Johnsons' request for 0.402 cfs was denied, now the WRD is proposing to allow permits for a total of 0.507 cfs in an area less than a quarter of a mile from the Johnsons' points of appropriation. I have permit G-16926 for 0.34 cfs, and will be protesting G-18342 for 0.167 cfs some 3 to 400 feet from my drilled well.

My expectation is that the well supply issues listed by Hollie would have been raised locally and communicated to Salem during the application/Water Availability Analysis phase. I inquired of Larry Menteer (whom I believe was Watermaster at the time), but he replied verbally through the current Watermaster, Shavon Haynes, that he has no memory of the case. Previously I had inquired of Shavon if there was a local file on this, and he indicated that the local file had also been purged. It is possible that this application denial was noted in another application denial in the same area which might shed more light on the issue. It is noteworthy that the denial of Johnson was not discussed in the Water Availability Analysis for either G-18342 or G-16926. Only by a chance interaction with Hollie Cannon did I become aware of this matter, so it is possible that there is more information available depending on how staff maintains and consults relevant previous Water Availability Analyses.

The concern driving my protest is that the time of G-15618 application, 2001, was the third driest water year in the preceding 25 years. If one year of drought impacted exempt users to the point of complaining to the Watermaster, what will the impact from the potential appropriation of 220 af considering that there are now more senior exempt users than in 2001? Frankly I am doubtful that my 100 af can be satisfied without creating domestic well problems. The condition that SWLs be measured in March is no remedy for this potential problem if groundwater reserves have already been depleted going into a drought winter. Who is liable in such a scenario? If these applications were for some remote valley in eastern Oregon there would not be this problem with the senior exempt users

I would be very appreciative if you can provide any pieces to this puzzle. My PFO protest deadline is September 29.

Thank you, Richard Harrington

SMITH Cindy S * WRD

From: Richard Harrington <richard.w.harrington@att.net>
Sent: Wednesday, September 20, 2017 11:10 AM
To: WOODCOCK Douglas E * WRD
Subject: Re: G-15618 Information

Pull F

Mr. Woodcock: I wrote you on September 1 regarding missing documents from G-15618 relevant to information not considered in the PFO for G-18342. Hopefully you will have time to review this in the near future as my protest must be received by September 29.

In addition, on August 29, I emailed Mr. Wallin and Mr. French a request for a decision regarding procedural improprieties in the processing of G-18342, and have not received the courtesy of a response. As Deputy Director, would you please inquire about the status of my request. I am attaching a PDF of that request.

On September 7, I met with Watermaster Shavon Haynes and Michael Thoma at the He He property to ostensibly look at what turned out to be a 2016 borrow pit, not the 35-acre-feet storage site. We did discuss several issues related to the subject Application, but there is no record of what was discussed and nothing was decided; but more importantly, I did not raise all my reservoir concerns because I only attended to inspect the subsurface geology of the excavation that had filled with water in the past water year. This informal meeting cannot substitute for the required Comment to an IR.

Thank you, Richard Harrington

On Wednesday, September 6, 2017 3:46 PM, WOODCOCK Douglas E * WRD <Douglas.E.Woodcock@oregon.gov> wrote:

Mr. Harrington. I wanted to confirm for you that I have received your email with the attachment (Hollie letter.pdf). I will review and get back with you. I need to advise you that I will be out of the office the week of Sept 11 and will get back with you soon after that. I hope this is acceptable. My office number is below if you need to reach after my return.

Thank you,

Doug

Douglas Woodcock
Deputy Director
Oregon Water Resources Department
(503) 986-0878 office
Douglas.E.Woodcock@oregon.gov

From: Richard Harrington [mailto:richard.w.harrington@att.net]
Sent: Friday, September 01, 2017 1:19 PM
To: WOODCOCK Douglas E * WRD
Subject: G-15618 Information

Hello Mr Woodcock.
I am writing to you because you are named in a 2002 letter from agent Hollie Cannon to applicant Jim Johnson regarding the denial of G-15618 in 2002. Attached is a copy of that letter. He writes:

SMITH Cindy S * WRD

From: Richard Harrington <richard.w.harrington@att.net>
Sent: Friday, September 01, 2017 1:19 PM
To: WOODCOCK Douglas E * WRD
Subject: G-15618 Information
Attachments: G-15618 Hollie letter.pdf

Hello Mr Woodcock.
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2) There are neighboring wells close by.
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Some 15 years and many applications later, it would be remarkable if you have any memory of this application. I need to ask because although the Johnsons' request for 0.402 cfs was denied, now the WRD is proposing to allow permits for a total of 0.507 cfs in an area less than a quarter of a mile from the Johnsons' points of appropriation. I have permit G-16926 for 0.34 cfs, and will be protesting G-18342 for 0.167 cfs some 3 to 400 feet from my drilled well.

My expectation is that the well supply issues listed by Hollie would have been raised locally and communicated to Salem during the application/Water Availability Analysis phase. I inquired of Larry Menteer (whom I believe was Watermaster at the time), but he replied verbally through the current Watermaster, Shavon Haynes, that he has no memory of the case. Previously I had inquired of Shavon if there was a local file on this, and he indicated that the local file had also been purged. It is possible that this application denial was noted in another application denial in the same area which might shed more light on the issue. It is noteworthy that the denial of Johnson was not discussed in the Water Availability Analysis for either G-18342 or G-16926. Only by a chance interaction with Hollie Cannon did I become aware of this matter, so it is possible that there is more information available depending on how staff maintains and consults relevant previous Water Availability Analyses.

The concern driving my protest is that the time of G-15618 application, 2001, was the third driest water year in the preceding 25 years. If one year of drought impacted exempt users to the point of complaining to the Watermaster, what will the impact from the potential appropriation of 220 af considering that there are now more senior exempt users than in 2001? Frankly I am doubtful that my 100 af can be satisfied without creating domestic well problems. The condition that SWLs be measured in March is no remedy for this potential problem if groundwater reserves have already been depleted going into a drought winter. Who is liable in such a scenario? If these applications were for some remote valley in eastern Oregon there would not be this problem with the senior exempt users

I would be very appreciative if you can provide any pieces to this puzzle. My PFO protest deadline is September 29.

Thank you, Richard Harrington

Oregon
John A. Kitzhaber, M.D., Governor

Water Resources Department
Commerce Building
158 12th Street NE
Salem, OR 97301-4172
(503) 378-3739
FAX (503) 378-8130
www.wrd.state.or.us

March 1, 2002

JIM & VIOLET JOHNSON
PO BOX 1186
EAGLE POINT, OREGON 97524

(541) 830-4897

Reference: File G-15618

Dear Applicant:

THIS IS NOT A PERMIT AND IS SUBJECT TO CHANGE AT THE NEXT PHASE OF PROCESSING.

This letter is to inform you of the unfavorable preliminary analysis of your water use permit application and to describe your options. In determining whether a water use permit application may be approved, the Department must consider the factors listed below, all of which must be favorable to the proposed use if it is to be allowed. Based on the information you have supplied, the Water Resources Department has made the following preliminary determinations:

Initial Review Determinations:

1. The proposed use is not prohibited by law or rule.

2. The use of water from two wells in Rogue River basin for irrigation of 35.9 acres is a classified use under OAR 690-515, the Rogue Basin Program.

3. The Department has determined, based upon OAR 690-09, that the proposed groundwater use will not have the potential for substantial interference with the nearest surface water source, namely Hog Creek.

4. The Department has determined, based upon available data, that the use of groundwater from the proposed wells **will not likely be available** in the amounts requested without injury to prior groundwater rights and/or within the capacity of the groundwater resource.

Summary of Allowable Water Use

Because item 4# above is unfavorable, the use of 0.402 cubic foot per second of water from two wells in Rogue River basin for irrigation of 35.9 acres is not allowable, and it appears unlikely that you will be issued a permit. At this time, you must decide whether to proceed or to withdraw your application as described below.

Please reference the application number when sending any correspondence regarding the conclusions of this initial review. Comments received within the comment period will be evaluated at the next phase of the process.

Withdrawal Refunds:

If you choose not to proceed, you may withdraw your application and receive a refund (minus a $50 processing charge per application.) To accomplish this you must notify the Department in writing by **Friday, March 15, 2002**. For your convenience you may use the enclosed "STOP PROCESSING" form.

To Proceed With Your Application:

If you choose to proceed with your application, you do not have to notify the Department. Your application will automatically be placed on the Department's Public Notice to allow others the opportunity to comment. After the comment period the Department will complete a public interest review and issue a proposed final order.

If A Permit Is Issued It Will Likely Include The Following Conditions:

1. Measurement, recording and reporting conditions:

   A. Before water use may begin under this permit, the permittee shall install a meter or other suitable measuring device as approved by the Director. The permittee shall maintain the meter or measuring device in good working order.

   B. The permittee 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.

   C. The Director may require the permittee to keep and maintain a record of the amount (volume) of water used and may require the permittee to report water use on a periodic schedule as established by the Director. In addition, the Director may require the permittee to report general water use information, the periods of water use and the place and nature of use of water under the permit. The Director may provide an opportunity for the permittee to submit alternative reporting procedures for review and approval.

2. Use of water under authority of this permit may be regulated if analysis of data available after the permit is issued discloses that the appropriation will measurably reduce the surface water flows necessary to maintain the free-flowing character of a scenic waterway in quantities necessary for recreation, fish and wildlife in effect as of the priority date of the right or as those quantities may be subsequently reduced.

3. The tentative priority date for this application is SEPTEMBER 28, 2001.

Information obtained from the Department of Environmental Quality (DEQ)indicates that the source of water identified in your application is "Water Quality Limited". That means that there are water quality concerns. DEQ will be looking at information from your application to see if additional conditions or restrictions are needed to protect the water quality situation. One possible outcome is that the Water Resources Department will propose in the proposed final order that your application be denied. You are encouraged to contact Tom Melville, (503) 229-5849 at DEQ to discuss the specifics of your application. Often, this information exchange can allow the water use to occur and at the same time keep the water quality situation from worsening.

If you have any questions:

Questions about the status of your application, processing timelines, or your upcoming Proposed Final Order should be directed to our Water Right Information Group at (503) 378-8455 extension 499. Feel free to call me at (503) 378-8455 extension 266 if you have any questions regarding the contents of this letter. Please have your application number available if you call. Address all other correspondence to: Water Rights Section, Oregon Water Resources Department, 158 12th ST. NE Salem, OR 97310, Fax: (503)378-6203.

Sincerely,

Russell W. Klassen
Initial Reviewer

cc: Regional Manager, Watermaster District 13, Water Availability Section
enclosures: Flow Chart of Water Right Process
Stop Processing Form

G-15618
wab 15-
pou 15-
gw B

APPLICATION FACT SHEET

Mail to: Applicant, Watermaster, District Biologist (ODFW)
If necessary, also mail to : Regional Water quality manager (DEQ), and DOA

Application File Number: G-15618

Applicant: JIM JOHNSON JOHNSON, VIOLET

County: JACKSON

Watermaster: District 13

Priority Date: SEPTEMBER 28, 2001

Source: TWO WELLS IN ROGUE RIVER BASIN

Use: IRRIGATION OF 35.9 ACRES

Quantity: 0.402 CUBIC FOOT PER SECOND

Basin Name & Number: Rogue, #15

Stream Index Reference: Volume 1A ROGUE R MISC

Point of Diversion Location: NENE, SECTION 28, T35S, R1W, W.M.; 162 FEET SOUTH & 312 FEET WEST FROM NE CORNER, SECTION 28 NENE, SECTION 28, T35S, R1W, W.M.; 232 FEET SOUTH & 328 FEET WEST FROM NE CORNER, SECTION 28

Place of Use: NWNW 17.3 ACRES, SECTION 27 NENE 14.7 ACRES NWNE 3.9 ACRES, SECTION 28, TOWNSHIP 35 SOUTH, RANGE 1 WEST, W.M.

14 DAY STOP PROCESSING DEADLINE DATE: Friday, March 15, 2002

PUBLIC NOTICE DATE: Tuesday, March 19, 2002

30 DAY COMMENT DEADLINE DATE: Thursday, April 18, 2002

WATER RIGHT SOLUTIONS, LLC
2779 Camp Baker Road
Medford, OR 97501
541-512-1159
Fax 541-512-1169

March 19, 2002

Mr. Jim Johnson
PO Box 1186
Eagle Point, Oregon 97524

Subject: water right filing

Dear Jim;

I discussed you filing with Mr. Doug Woodcock of the Water Resources Department today. The reasons for the unfavorable finding in the "initial review" are

1) There have been well problems in the past with the geologic formation that your wells are located in.
2) There are neighboring wells close by.
3) There is evidence of well decline in this area.

Without supporting information the Water Resources Department will only allow the exempt uses (which is household use and irrigation of ½ acre yard and garden).

The information needed to proceed with the filing is

1) Information on adjacent well (location and well logs)
2) Pump test of one of your wells to determine the affect on neighboring wells.

The test pump procedure is to get access to the neighboring well. Pump your well for up to eight hours. Measure the draw down in your well and the neighboring well during the pump test. Then after the test pumping is done continue to measure the water level in the neighboring wells to determine the rate of recovery.

Once the Water Resources Department has this information they will determine how much water can be withdrawn without harm to the neighboring wells. There are a couple of companies that do this kind of testing locally. They are Ferrero Geologic and Enviro Logic.

At this point you have two options. One is to proceed with the test to obtain as much water right as they will grant (the amount granted could be greatly reduced from you application). The other is to withdraw the application and get you filing fee (less $50) back.

Let me know if I can be of further service to you.

Sincerely,

Hollie Cannon

PFO Checklist

Application #: G-18342 Applicant: HE HE PROPERTIES OF AMERICA

X IR requested add'l info X No ☐ Yes _____

X Have conflicts been addressed? X NA ☐ No ☐ Yes _____

X IR date 10.7.16 Noticed on 10.11.16 Comment Deadline 11.10.16

X Electronic/written comments? ☐ No X Yes (2) ① Richard Harrington ② Michelle Colby Kielman Comment eval? ☐ NA ☐ No X Yes

X Allowed Use/Rate/Season NU DOM 0.167 cfs / YR (30 ac) Limit 1/40 Duty 80

Make specific finding in PFO if ☐ Rate/Limit higher-than-standard ☐ Duty higher-than-standard

X Confirm POD/POU are correct per the map

X Is second gw review necessary? ☐ NA X No ☐ Yes Complete? ☐ No ☐ Yes Add'l fees ☐ necessary ☐ collected ☐ needed

X DIV 9 ☐ NA ☐ will likely be available... ☐ will **not** likely be available... X will, if properly conditioned...

X No PSI Table C4a NOT filled out ☐ No PSI Table C4a filled out - Highest impact? _____ Month? _____

☐ PSI per 690-009-0040(4) ☐ PSI per 690-009-0040(5) well _____ has PSI with _____

GW conditions 7C; 7J; B2(c) single aquifer in bedrock

X Conditions _____

☐ **Small** ≤ 0.1 CFS, ≤ 9.2 AF ☐ **Medium** > 0.1 CFS but < 0.25 CFS, > 9.2 AF but < 100 AF X **Large** ≥ 0.25 CFS, ≥ 100 AF NU

X SW availability X NA ☐ 80% ☐ 50% _____

X DIVISION 33 X NA ☐ No ☐ UPPER COLUMBIA (not allowed 4/15 - 9/30) ☐ LOWER COLUMBIA ☐ STATEWIDE

• X SWW ☐ NA X above ☐ within Rogue If GW and interference, copy form for Shawn O-T.

X Land Use X allowed outright ☐ decision obtained ☐ being pursued ☐ not being pursued (add text box - deny)

X Needed before permit X NA ☐ fees ☐ evidence of well repair ☐ LU ☐ easement ☐ plans/specs ☐ storage contract

• X Changes from IR determinations

- FOF #3 to IR: AG = NU PP
- Storage componant included in PFO Buttercup Pond at 3.44 AF

• X Notes Updated Agent: Mark Wiest

add to Pub. Notice List & to application

- G-18342
- G-18350
- G-169216 (old)
- G-156018 (old)

☒ Copy to ~~☐ SWR~~ ☒ WM # 13

~~☐ NCR~~

☒ agent Mark Wiest: mark_wiest@yahoo.com

☐ CWRE _____

☐ A.L.O. _____

☐ Commeter _____

District: Eagle Point Irr. Dist; PO Box 157; Eagle Point OR 97524

EXAM FEE REQUIRED	2170-	RECORDING FEE REQUIRED	450-
EXAM FEE PAID	2170-	RECORDING FEE PAID	450-
STILL OWED	0	STILL OWED	*+70- *

Name: Lisa Graham **Date:** 2/27/2017 **Peer Reviewer:** _____

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* Fees 0.167 CFS	Base	1150-	
3.44 AF storage	Up to 1 CFS	300-	
_____	~~Add'l CFS~~	_____	
1 well(s)/POD(s)	Up to 20 AF 4 x $30	120-	
_____	~~Add'l AF @ $1~~	_____	
2 use(s)	Add'l 1 POD/POA 1 use +	600-	
exam <= 2100 (1450+650)	Exam Fee Required =	2170-	Rec Fee Req'd 450-
	Exam Fee Paid	2170-	Red Fee Paid 380-
2100+450=2550 paid total	Still Owed/Refund	0	Owed before permit 70.00 owed before FO

IR CHECKLIST

Application #: G-18342 **Applicant:** HE HE PROPERTIES OF AMERICA **Priority Date:** July 15, 2016

X Requested **Use/Rate/Season** NU / 0.167 / YR **Limit** _____ **Duty** _____

Allowed **Use/Rate/Season** NU / 0.167 / YR **Limit** 1/40 **Duty** _____

X **DIV 9** ~~X~~ NA ☐ will likely be available... ☐ will **not** likely be available... X will, if properly conditioned...

~~X~~ No PSI OR well _____ has PSI with _____

☐ Reduce rate to avoid PSI _____

GW conditions 7C; 7J, ~~Med~~; A single aquifer in the bedrock. B2(c)

X **Conditions** _____

☐ **Small** ≤ 0.1 CFS, ≤ 9.2 AF ☐ **Medium** > 0.1 CFS but < 0.25 CFS, > 9.2 AF but < 100 AF ~~X~~ **Large** ≥ 0.25 CFS, ≥ 100 AF

use **at least** Medium for: Siltcoos Lake, stored water contract, and Sandy Basin ground water
use Large for: Tenmile Lake, NU or other temp control, and gov. entities, HC exceptions; and if GW in South Salem Hills, or 10+ acres in Stage Gulch CGWA; Large-7g, Large-7i for 7g/7i

X **ORS 538 prohibits use** ~~X~~ No ☐ Yes (stop processing and return app and fees)

X Stream is **withdrawn** ~~X~~ NA ☐ No ☐ Yes, allows use/season _____

X **Use** is ☐ allowed ☐ not allowed ☐ limited ~~X~~ OAR ☐ Compact 690-515-0010

X **SW availability** ~~X~~ NA ☐ 80% ☐ 50% _____ WID: _____

☐ Use DWF's 6/21/05 non-standard W/A memo if the source is: trib to Drews Res, Snake R, Columbia R, North Umpqua R below Rock Cr, or within drainages of Lost R, Chehalem Cr, or Champoeg Cr (including Mission Cr and Case Cr)

X **DIVISION 33** ~~X~~ NA ☐ No ☐ UPPER COLUMBIA (not allowed 4/15 - 9/30)
☐ LOWER COLUMBIA
☐ STATEWIDE

X Use is within a **Priority WAB** ~~X~~ NA ☐ No ☐ Yes

X **4D** Rules apply ~~X~~ NA ☐ No ☐ Yes

X **SWW** ☐ NA ~~X~~ above ☐ within Rogue (If GW and interference, copy form for Shawn.)

X POU **conflict** ☐ No ☐ No, different sources ☐ No, make up a deficiency in rate ☐ No, existing not at max. rate

☐ Yes _____

X **Use is supplemental,** checked for primary rights w/ diff source ~~X~~ NA ☐ No ☐ Yes limits _____

X **App w/in a District boundary** ☐ No ~~X~~ Yes, cc: Eagle Point Irr Dist.

X **Land use** ~~X~~ allowed outright ☐ not allowed ☐ being pursued ☐ not being pursued ☐ decision obtained ☐ receipt only ☐ N/A

X **MU or QM** ~~X~~ NA ☐ will complete construction within 20 years ☐ Lisa reviewed recommendations _____

X **Storage contract** ~~X~~ NA ☐ BOR ☐ Doug Co ☐ Corp of Eng ☐ needed ☐ obtained _____

X POU is within **North Umpqua or Tenmile Lake for domestic use** and the spreadsheet was updated ~~X~~ NA ☐ Yes

X **Forms** ~~X~~ NA ☐ HC except (receipts/well logs attached) ☐ spring description ☐ Form M

Application #: G-18342 Applicant: HE HE PROPERTIES OF AMERICA

X Authorized agent specified ☒ No ☐ Yes _____

X Copy to ☒ SWR ☒ WM # 13 ☐ a.l.o. ☐ city _____
☐ NCR ☐ agent ☒ district (w/in 5-mile muni wells)
☐ CWRE

district: Eagle Point Irr Dist.

X Fees 0.167 CFS Base 1150.00 ✓
__ AF Up to 1 CFS 300.00 ✓
_____ Add'l CFS _____
1 well(s)/POD(s) Up to 20 AF 4 x 30 ~~600.00~~ OK
_____ Add'l AF @ $1 ~~15.00~~ OK
2 use(s) Add'l ___ POD/POA ___ use + ~~30.00~~ Res. OK
Exam Fee Required = ~~2095.00~~ OK Rec Fee Req'd 450.00
1450 + 650 Exam Fee Paid ~~2100.00~~ OK Red Fee Paid 450.00
Still Owed ~~(+5.00)~~ OK Owed before permit 0
~~$1450~~

No storage component + flat rate, not budget, not AF.

1 well life

X App/map meet min. req ☒ Yes ☐ No ☐ ALO info ☐ map ☐ legal ~~$(50)~~ REFUND
(If not, send IR certified)

X Req'd before PFO ☒ NA ☐ LU approve/pursue ☐ ALO info ☐ exam fees

X Req'd before permit ☒ NA ☐ recording fees ☐ well repair ☐ LU ☐ easement ☐ plans/specs ☐ storage contract

X Letter format ☒ good ☐ limited ☐ bad ☐ bad w/ rate reduction opportunity ☐ bad w/ HC opportunity

X Scanned images exist for application form and map

*50 refund.

Name: Lisa Graham Date: 9/28/2016 Peer Reviewer: bp

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Oregon Water Resources Department
Point of Diversion Characteristics

Point of Diversion Characteristics

Right:	App: G 18342 *
Name:	HE HE PROPERTIES OF AMERICA

TRSQQ: 35.00S-01.00W-27-SWNW

County: Jackson
Basin: Rogue
WM District: 13
WM Region: SW
Withdrawn Area:

No PSI

WAB: LITTLE BUTTE CR > ROGUE R - AT MOUTH (263)
ROGUE R > PACIFIC OCEAN - AB CURRY G AT GAGE 14359000 (270)
Priority WAB: LITTLE BUTTE CR @ mouth (OWRD: Very good, ODFW: Highest) (263)
Rule 4D:
Groundwater Restricted Area:
Scenic Water Way: ABOVE The Rogue Scenic Waterway
Division 33: STATEWIDE
Water Quality Limited:

G-18342

DIVISION 515

ROGUE BASIN PROGRAM

690-515-0010 ~~X~~ N/A

Little Butte Creek Basin

(1) Classifications:

(a) In accordance with ORS 536.220, 536.300, 536.310, and 536.340, the waters of the Little Butte Creek Basin are classified for domestic, livestock, **irrigation**, **agricultural use**, power development, recreation, wildlife, and fish life purposes, except for water administratively withdrawn from appropriation;

(3) Storage:

(a) Potential reservoir sites should be identified in the comprehensive land-use planning process for possible future development or until alternative methods of meeting water needs have been developed. Immediate consideration should be given to the following sites:

Oregon Water Resources Department
Water Rights with Coincident Places of Use

Place of Use Conflict Report

The following rights have acreage in the same quarter-quarter as App: G 18342 *

Right	Name	Decree	App	Permit	Cert	Priority	Status	Use	T-R-S-QQ	DLC	Gov't Lot	Acres
APP: P 74805 *	DONALD BURTON		P-74805			10/27/1994	NC	LV	35.00S-01.00W-27- ?			
APP: P 75120 *	GERALD A AEBISCHER		P-75120			11/9/1994	NC	LV	35.00S-01.00W-27- ?			

no conflict

WATER RESOURCES DEPARTMENT

MEMO

Sept 7, 2016

TO: Application G- 18342

FROM: GW: Jen Woody
(Reviewer's Name)

SUBJECT: Scenic Waterway Interference Evaluation

☒ YES
The source of appropriation is within or above a Scenic Waterway

☐ NO

☒ YES
Use the Scenic Waterway condition (Condition 7J)

☐ NO

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

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

DISTRIBUTION OF INTERFERENCE

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

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

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

PUBLIC INTEREST REVIEW FOR GROUNDWATER APPLICATIONS

TO: Water Rights Section Date 9/7/2016

FROM: Groundwater Section Jen Woody
Reviewer's Name

SUBJECT: Application G- 18342 Supersedes review of n/a
Date of Review(s)

PUBLIC INTEREST PRESUMPTION; GROUNDWATER

OAR 690-310-130 (1) *The Department shall presume that a proposed groundwater use will ensure the preservation of the public welfare, safety and health as described in ORS 537.525.* Department staff review groundwater applications under OAR 690-310-140 to determine whether the presumption is established. OAR 690-310-140 allows the proposed use be modified or conditioned to meet the presumption criteria. **This review is based upon available information and agency policies in place at the time of evaluation.**

A. GENERAL INFORMATION: Applicant's Name: Louis Liu, He He Properties of America County: Jackson

A1. Applicant(s) seek(s) 0.167 cfs from 1 well(s) in the Rogue Basin, _____ subbasin

A2. Proposed use Nursery Seasonality: year-round

A3. Well and aquifer data **(attach and number logs for existing wells; mark proposed wells as such under logid):**

Well	Logid	Applicant's Well #	Proposed Aquifer*	Proposed Rate(cfs)	Location (T/R-S QQ-Q)	Location, metes and bounds, e.g. 2250' N, 1200' E fr NW cor S 36
1	Proposed	1	Bedrock	0.167	35S/1W-27 SW ¼ NW ¼	1527' S, 392' E fr NW cor S 27
2						
3						
4						
5						

* Alluvium, CRB, Bedrock

Well	Well Elev ft msl	First Water ft bls	SWL ft bls	SWL Date	Well Depth (ft)	Seal Interval (ft)	Casing Intervals (ft)	Liner Intervals (ft)	Perforations Or Screens (ft)	Well Yield (gpm)	Draw Down (ft)	Test Type
1	1420	108*	15.67*	3/19/2014*	134*	0-21*	0-21*	n/a	n/a	100*	89*	Air*

Use data from application for proposed wells.

A4. **Comments:** The nearest located well (JACK 2932) was used to estimate the well description. No well construction details (well depth, well seal, casing depth) are provided in the application. Well construction conditions are recommended in Section B2 to address this uncertainty.

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

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

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

B1. **Based upon available data**, I have determined that groundwater* for the proposed use:

a. ☐ **is** over appropriated, ☐ **is not** over appropriated, *or* ☒ **cannot be determined to be** over appropriated during any period of the proposed use. * This finding is limited to the groundwater portion of the over-appropriation determination as prescribed in OAR 690-310-130;

b. ☐ **will not** *or* ☐ **will** likely be available in the amounts requested without injury to prior water rights. * This finding is limited to the groundwater portion of the injury determination as prescribed in OAR 690-310-130;

c. ☐ **will not** *or* ☐ **will** likely to be available within the capacity of the groundwater resource; or

d. ☒ **will, if properly conditioned**, avoid injury to existing groundwater rights or to the groundwater resource:
   i. ☒ The permit should contain condition #(s) **7C, 7J, Medium Water Use Reporting Condition**;
   ii. ☒ The permit should be conditioned as indicated in item 2 below.
   iii. ☐ The permit should contain special condition(s) as indicated in item 3 below;

B2. a. ☐ **Condition** to allow groundwater production from no deeper than _____ ft. below land surface;

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

c. ☒ **Condition** to allow groundwater production only from ~~the~~ **a single aquifer in the bedrock** groundwater reservoir ~~between approximately _____ ft. and _____ ft. below land surface;~~

d. ☐ **Well reconstruction** is necessary to accomplish one or more of the above conditions. The problems that are likely to occur with this use and without reconstructing are cited below. Without reconstruction, I recommend withholding issuance of the permit until evidence of well reconstruction is filed with the Department and approved by the Groundwater Section.

Describe injury –as related to water availability– that is likely to occur without well reconstruction (interference w/ senior water rights, not within the capacity of the resource, etc): N/A

B3. **Groundwater availability remarks:** The applicant proposes to use 75 gallons per minute (gpm) from the fractured volcaniclastic bedrock aquifer. There is one permitted groundwater right with 2 points of appropriation (POAs) within ¼ mile of the proposed POA. There are 47 well logs on file for Sections 27 and 28 combined, indicating moderate groundwater development for small exempt uses. Well-to-well interference is unpredictable in fractured rock aquifers because fractures are not continuous or consistently connected, so there is some uncertainty regarding the potential for interference with the nearby senior groundwater right. Static water level data are sparse but suggest reasonable stability in the subject aquifer (see hydrograph). Therefore, the groundwater resource cannot be determined to be over-appropriated. The proximity to neighboring POAs raises the potential for interference with senior groundwater users, but pumping drawdown effects in a fractured aquifer are not expected to be widespread. Annual water level and water use monitoring and reporting is recommended to address the potential impact to senior users.

Since the application does not specify a proposed well depth, Condition B2 (c) is recommended to limit well construction to a single aquifer in the fractured bedrock aquifer.

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

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

Well	Aquifer or Proposed Aquifer	Confined	Unconfined
1	**Volcaniclastic rocks of the Western Cascades**	☒	☐
		☐	☐
		☐	☐
		☐	☐
		☐	☐

Basis for aquifer confinement evaluation: Nearby well log JACK 2932 reports the water level rises above the water-bearing zone, indicating the aquifer is more confined than unconfined.

C2. **690-09-040 (2) (3):** Evaluation of distance to, and hydraulic connection with, surface water sources. All wells located a horizontal distance less than ¼ mile from a surface water source that produce water from an unconfined aquifer shall be assumed to be hydraulically connected to the surface water source. Include in this table any streams located beyond one mile that are evaluated for PSI.

Well	SW #	Surface Water Name	GW Elev ft msl	SW Elev ft msl	Distance (ft)	Hydraulically Connected? YES	NO	ASSUMED	Potential for Subst. Interfer. Assumed? YES	NO
1	1	**Hog Creek**	**1424**	**1400**	**4040**	☒	☐	☐	☐	☒
						☐	☐	☐	☐	☐
						☐	☐	☐	☐	☐
						☐	☐	☐	☐	☐
						☐	☐	☐	☐	☐
						☐	☐	☐	☐	☐
						☐	☐	☐	☐	☐
						☐	☐	☐	☐	☐

Basis for aquifer hydraulic connection evaluation: Groundwater elevation at the well is above surface water. Groundwater likely discharges to surface water down-gradient, indicating hydraulic connection.

Water Availability Basin the well(s) are located within: Watershed ID #: 270 ROGUE R > PACIFIC OCEAN - AB CURRY G AT GAGE 14359000

C3a. **690-09-040 (4):** Evaluation of stream impacts for each well that has been determined or assumed to be **hydraulically connected and less than 1 mile** from a surface water source. Limit evaluation to instream rights and minimum stream flows that are pertinent to that surface water source, and not lower SW sources to which the stream under evaluation is tributary. Compare the requested rate against the 1% of 80% *natural* flow for the pertinent Water Availability Basin (WAB). If Q is not distributed by well, use full rate for each well. Any checked ☒ box indicates the well is assumed to have the potential to cause PSI.

Well	SW #	Well < ¼ mile?	Qw > 5 cfs?	Instream Water Right ID	Instream Water Right Q (cfs)	Qw > 1% ISWR?	80% Natural Flow (cfs)	Qw > 1% of 80% Natural Flow?	Interference @ 30 days (%)	Potential for Subst. Interfer. Assumed?
1	1	☐	☐	**n/a**	**n/a**	☐	**1130**	☐	*	☐
		☐	☐			☐		☐		☐
		☐	☐			☐		☐		☐
		☐	☐			☐		☐		☐
		☐	☐			☐		☐		☐

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

	SW #		Qw > 5 cfs?	Instream Water Right ID	Instream Water Right Q (cfs)	Qw > 1% ISWR?	80% Natural Flow (cfs)	Qw > 1% of 80% Natural Flow?	Interference @ 30 days (%)	Potential for Subst. Interfer. Assumed?
			☐			☐		☐		☐
			☐			☐		☐		☐
			☐			☐		☐		☐
			☐			☐		☐		☐

Comments: * Interference at 30 days could not be estimated because the terrain (high-relief slopes) and geology (fractured bedrock aquifer) do not meet model assumptions of the widely accepted techniques for determining stream depletion (e.g., Hunt 1999, 2003).

C4a. **690-09-040 (5):** Estimated impacts on **hydraulically connected surface water sources greater than one mile** as a percentage of the proposed pumping rate. Limit evaluation to the effects that will occur up to one year after pumping begins. This table encompasses the considerations required by 09-040 (5)(a), (b), (c) and (d), which are not included on this form. Use additional sheets if calculated flows from more than one WAB are required.

Non-Distributed Wells													
Well	SW#	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
		%	%	%	%	%	%	%	%	%	%	%	%
Well Q as CFS													
Interference CFS													

Distributed Wells													
Well	SW#	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
		%	%	%	%	%	%	%	%	%	%	%	%
Well Q as CFS													
Interference CFS													
		%	%	%	%	%	%	%	%	%	%	%	%
Well Q as CFS													
Interference CFS													
		%	%	%	%	%	%	%	%	%	%	%	%
Well Q as CFS													
Interference CFS													
		%	%	%	%	%	%	%	%	%	%	%	%
Well Q as CFS													
Interference CFS													
		%	%	%	%	%	%	%	%	%	%	%	%
Well Q as CFS													
Interference CFS													
		%	%	%	%	%	%	%	%	%	%	%	%
Well Q as CFS													
Interference CFS													

(A) = Total Interf.												
(B) = 80 % Nat. Q												
(C) = 1 % Nat. Q												
(D) = (A) > (C)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
(E) = (A / B) x 100	%	%	%	%	%	%	%	%	%	%	%	%

(A) = total interference as CFS; (B) = WAB calculated natural flow at 80% exceed. as CFS; (C) = 1% of calculated natural flow at 80% exceed. as CFS; (D) = highlight the checkmark for each month where (A) is greater than (C); (E) = total interference divided by 80% flow as percentage.

Basis for impact evaluation: N/A

C4b. **690-09-040 (5) (b) The potential to impair or detrimentally affect the public interest is to be determined by the Water Rights Section.**

C5. ☐ **If properly conditioned**, the surface water source(s) can be adequately protected from interference, and/or groundwater use under this permit can be regulated if it is found to substantially interfere with surface water:

i. ☐ The permit should contain condition #(s)_____;

ii. ☐ The permit should contain special condition(s) as indicated in "Remarks" below;

C6. **SW / GW Remarks and Conditions:** Under OAR 690-009 the proposed use does not produce the finding of potential for substantial interference with nearby surface water.

References Used:

Beaulieu, J.D., Hughes, P.W. 1977 Land Use Geology of Central Jackson County, Oregon. State of Oregon Department of Geology and Mineral Industries Bulletin 94, 87 p.

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

Hunt, B. 2003. Unsteady Stream Depletion when Pumping from a Semiconfined Aquifer. Journal of Hydrologic Engineering, Vol 8(1), pp 12-19.

U.S. Geological Survey topographic map, Shady Cove and Eagle Point Quadrangles.

D. WELL CONSTRUCTION, OAR 690-200

D1. **Well #:** _____ **Logid:** this section does not apply

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

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

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

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

Water Availability Tables

Water Availability Analysis

Detailed Reports

ROGUE R > PACIFIC OCEAN - AB CURRY G AT GAGE 14359000

ROGUE BASIN

Water Availability as of 9/7/2016

Watershed ID #: 270 (Map) Exceedance Level:80%

Date: 9/7/2016 Time: 11:41 AM

Water Availability Calculation

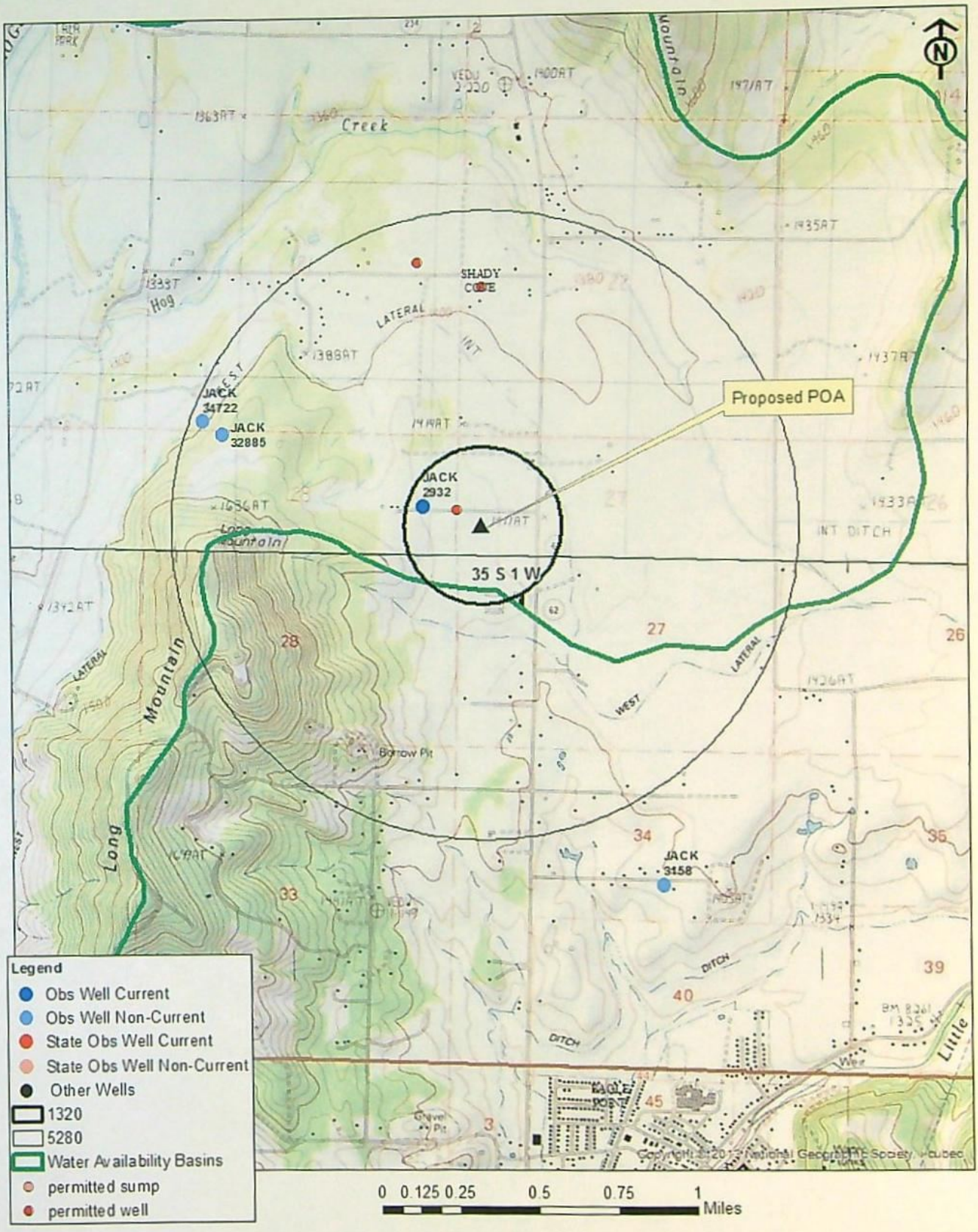
Monthly Streamflow in Cubic Feet per Second

Annual Volume at 50% Exceedance in Acre-Feet

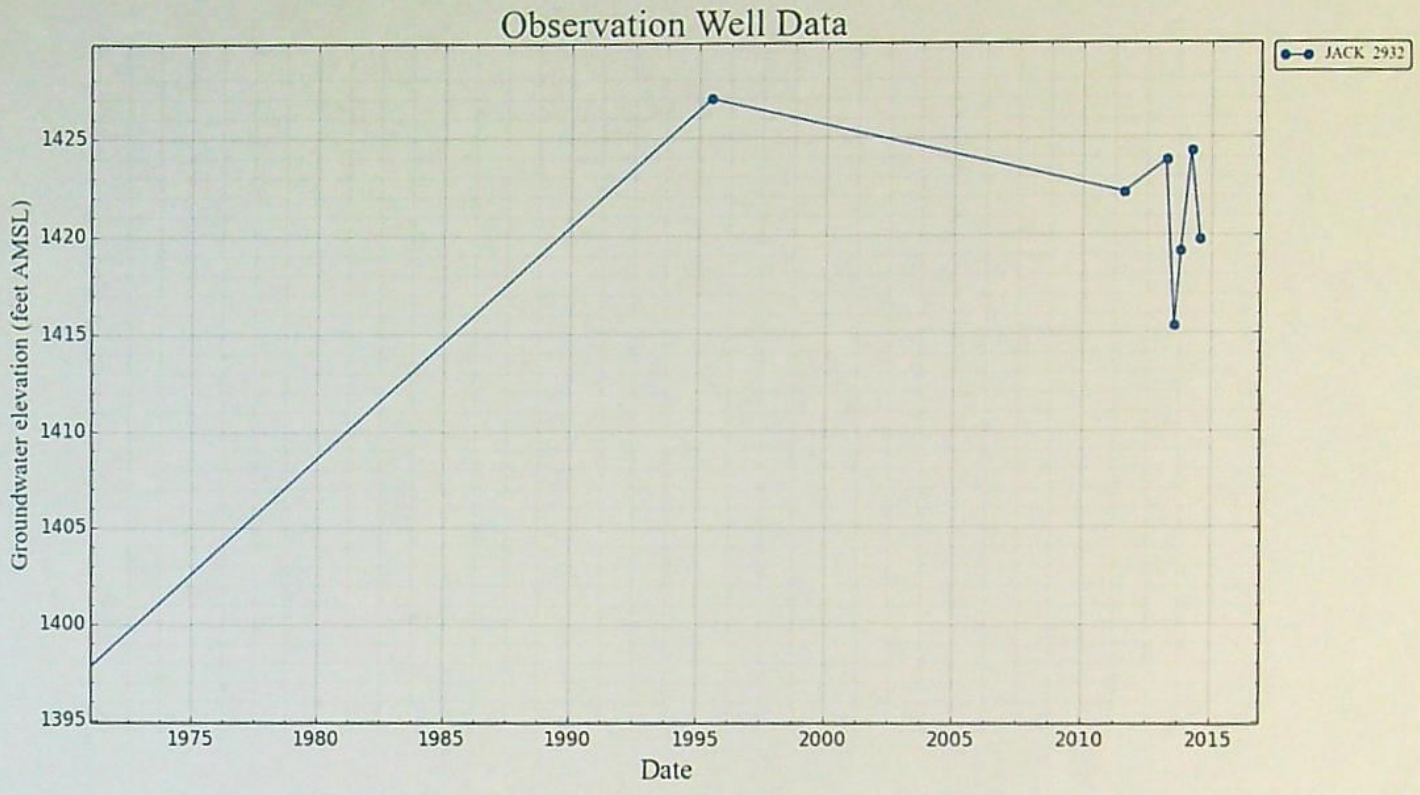
Month	Natural Stream Flow	Consumptive Uses and Storages	Expected Stream Flow	Reserved Stream Flow	Instream Flow Requirement	Net Water Available
JAN	2,180.00	1,130.00	1,050.00	0.00	1,200.00	-147.00
FEB	2,710.00	2,040.00	666.00	0.00	1,200.00	-534.00
MAR	2,750.00	1,820.00	934.00	0.00	1,200.00	-266.00
APR	2,810.00	1,030.00	1,780.00	0.00	1,200.00	576.00
MAY	2,750.00	367.00	2,380.00	0.00	1,200.00	1,180.00
JUN	1,760.00	343.00	1,420.00	0.00	1,200.00	217.00
JUL	1,330.00	368.00	962.00	0.00	1,200.00	-238.00
AUG	1,160.00	330.00	830.00	0.00	1,200.00	-370.00
SEP	1,130.00	275.00	855.00	0.00	1,200.00	-345.00
OCT	1,160.00	227.00	933.00	0.00	1,200.00	-267.00
NOV	1,370.00	344.00	1,030.00	0.00	1,200.00	-174.00
DEC	1,810.00	561.00	1,250.00	0.00	1,200.00	49.00
ANN	1,900,000.00	528,000.00	1,370,000.00	0.00	869,000.00	533,000.00

Well Location Map

G-18342 He He Properties of America
T35S/R1W-Section 27



Water-Level Trends in Nearby Wells



E-2 Standard Application Completeness Checklist

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

Yes No This is the checklist used by WRD staff

Application G-18342 County Jackson Priority Date 7/15/16

Township 35s Range 1W Section 27 & 28

Amount 75 gpm Use Nursery WM Dist. # 13

Applicant Name Louis Liu / HE HE Properties of America

Receipt No. 120537 Caseworker Assigned: ☐ Barbe ☐ Kim ☒ Lisa

☑ Contact info: Applicant/Organization Name and Mailing Address

☑ Signature (in ink) of *all* applicants or the applicant's authorized agent (include title or authority if for an organization or corporation).

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

If No:

☐ The affected landowner's name and mailing address must be listed

☑ A signed statement declaring the existence of either written authorization or an easement permitting access to land crossed by the proposed ditch canal or other work must be submitted.

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

☐ If the source is stored water, is the stored water component filled out and does the applicant own the reservoir or include a non-expired agreement for stored water? (ORS 537.400)
NOTE: *A surface water application cannot be filed at the same time as a Reservoir or Alt Reservoir if it will be for the use of the stored water under the PROPOSED Reservoir application, Exp. Secondary (E2).*

☐ If for stored water not under contract, is the source authorized under a permit, certificate, or decree?

Permit or Certificate issued? Y / N Permit or Certificate # _____

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

☑ Proposed water use

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

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

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

N/A ☐ *For all standard reservoir applications:* Preliminary plans and specifications including dam height, width, crest width and surface area for each reservoir.

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

NA ☒ Supplemental data sheets enclosed (if needed)

- ☐ Form M (Municipal or Quasi-Municipal)
- ☐ Spring Description Sheet (if source is a spring)

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

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

☒ The proposed source IS / IS NOT (TBD) (circle one) restricted or withdrawn from further appropriation. *NOTE: If it is withdrawn under ORS 538, then return application and fees. If it is withdrawn by other means, accept the application and a negative IR will be issued.*

☒ The **map** must meet all the minimum requirements of OAR 690-310-0050.

- ☒ Township, Range, Section
- ☒ Location of main canals, ditches, pipelines or flumes (if POA/POD is outside of POU)
- ☒ Place of use, ¼-¼'s and tax lot clearly identified
- ☒ Even map scale not less than 4" = 1 mile (1"= 1320 ft.); examples: 1" = 100 ft., 1" = 200 ft.
- ☒ Location of *each* diversion point, well or dam by reference to a recognized public land survey corner. Multiple wells shall be uniquely labeled, and identified on well logs if existing.
- ☒ Reference corner on map
- ☒ North Directional Symbol
- ☒ Number of acres per ¼-¼ if for irrigation, nursery, or agriculture
- NA ☒ For a standard reservoir application to store ≥ 9.2 acre feet AND having a dam height ≥ 10 feet, map must be prepared by a CWRE

☒ **Fees:**

Base Fee	$ 1,150	Permit Recording Fees	$ 450
1st CFS @ $300	$ 300	Mitigation Fee	$
____add'l CFS @ $300 ea	$		
____ AF up to 20 AF @ $30 ea	$	Rec Fee Total	$ 450
____ add'l AF @ $1 ea	$	Rec Fee Paid	$ 450
____ add'l ☐pod/poa ☐use @ _____ ea	$		
____ add'l res @ $125 ea	$		
Exam Fee Total	$ 1450	Total Fees	$ 1900
Exam Fee Paid	$ 1450	Paid	$ 1900
		Amount Due	$

Reviewed by: Scott CSG Date: 7-18-16

Water Rights Section – Application Comment Evaluation Form

Date: July 24, 2017 Caseworker: Lisa Graham

Application Number: G-18342

Name of Commentor: Michelle Colby Kielman

Description:

Hello, I am a neighbor and I am very concerned about how this well will be detrimental to my own domestic well. In 2002 Jim Johnson who previously owned my property too tried to obtain a permit for the use of groundwater. The department determined based on available data the use for that well would not likely be available- reasons stated in the report - there have been well problems in the past, neighbor wells were close by and there is evidence of well decline in this area. I am also curious as to why as neighbors we have not be contacted to have the appropriate well testing on our wells to be certain that as a home owner I won't be hauling in water here in the near future?? Please review document G-15618, if you need a copy I would be happy to provide. Thank you Michelle Colby Kielman

Evaluation of Comment:

The Department considered the comments made by the commentor and understands there are concerns that there will be detrimental impact on their domestic well.

Finding for PFO:

The Department reviewed the comments made by the commentor and has determined that regulation and proper conditions imposed on this application will protect the resource.

Oregon Water Resources Department
Print Preview

Main Help
Return Contact Us

Application: G 18342

Name First, Mi, Last	Michelle	C	Kielman	**Received Date**	11/8/2016	**Time**	1:46 PM
Company							
Name Other	Michelle Colby Updegraff						
Street	13499 Highway 62						
City	Eagle Point	**State**	Oregon	**Zip**	97524		
Home Phone		**Cell Phone**	5415313086				
Company Phone	5417720000	**Fax Phone**					
Email Address	colby@orop.com						

Comments

Hello, I am a neighbor and I am very concerned about how this well will be detrimental to my own domestic well. In 2002 Jim Johnson who previously owned my property too tried to obtain a permit for the use of groundwater. The department determined based on available data the use for that well would not likely be available- reasons stated in the report - there have been well problems in the past, neighbor wells were close by and there is evidence of well decline in this area. I am also curious as to why as neighbors we have not be contacted to have the appropriate well testing on our wells to be certain that as a home owner I won't be hauling in water here in the near future?? Please review document G-15618, if you need a copy I would be happy to provide. Thank you
Michelle Colby Kielman

Water Rights Section – Application Comment Evaluation Form

Date: July 24, 2017 Caseworker: Lisa Graham

Application Number: G-18342

Name of Commentor: Richard Harrington

Description:

As holder of permit G-16926, I have several concerns regarding G-18342 and G-18350. The issue of hydraulic interference with my wells may arise at some time in the future. With 3 water users in relatively close proximity pumping ground water, it may be very difficult to establish hydraulic connectivity of the different wells once usage begins and continues year round. However, we are now at a unique time in that Eagle Point Irrigation District has shut down for the winter, meaning that seepage from their canals and infiltration from flood-irrigated fields has ceased. Although locally there has been abnormally high rainfall in the month of October, dry soil has probably absorbed most of this in the relevant non-irrigated lands, such that rainfall has not yet infiltrated to ground water. However, it is currently raining and wet weather forecast for the next week, with longer term forecasts indicating wetter than normal. If Static Water Levels for my well (JACK 2932/34376)), my neighbor to the north (JACK 54779 and 54789), and wells at the former Willamette Egg Farm (JACK 2908, 2909, 2913, 2914, 2916, 2925, 2926, and 30158), now owned by the applicant for G-18350, could all be measured the same day and at some future time a licensed surveyor could determine differences in well head elevations, then the question of hydraulic connectivity could reliably be answered. The approach to water level equilibrium is now at hand, but may soon slip away. The alternative is to wait for a time of water shortage, with the potential for denial of responsibility and a demand for proof of connectivity by the junior water rights holders. This would put an unfair burden on the senior water right holder and waste OWRD staff time in refereeing the matter. Additionally, it would be better for the holders of G-18342 and G-18350 to know the potential for being shut down before substantially more has been invested. As the permitting agency, OWRD has a responsibility to all parties to employ all reasonably obtainable information when considering the granting of permits. Please take action.

Both G-18342 and G-18350 are for "nursery use". The Initial Review for G-18342 indicates this use will be approved. Nursery use allows a 5 month longer usage of ground water than traditional agricultural usage. Propagation by cuttings for the purpose of cloning selected strains is legitimate under ORS 571.005 5), but controlling growing conditions (e.g. light wave length, photo period, etc.) to optimize production of the end product is not. Allowing other than strict nursery usage violates the **principle of prior appropriation**. Please refer me to the OWRD policy directive, memorandum, or statutory authority under which year round production of mature marijuana for sale would qualify as "nursery use". If these applications are approved, how will the OWRD ensure that usage during the winter months will be strictly limited to propagation and not production of an indoor commercial field crop?

Additional emails and pages are included in file (G-18342) from Richard Harington (G-18342).

Evaluation of Comment:

The Department considered the comments made by the commentor and understands the hydraulic connectivity concern and is aware that the applicant is requesting year-round nursery use.

Finding for PFO:

The Department reviewed the comments made by the commentor and has determined that regulation and proper conditions imposed on this application will protect the resource.

TONKON TORP LLP
ATTORNEYS

1600 Pioneer Tower
888 SW Fifth Avenue
Portland, Oregon 97204
503.221.1440

Janet E. Neuman

Direct Dial: 503.802.5722
Direct Fax: 503.972.7422
Janet.Neuman@tonkon.com

September 26, 2017

Via Federal Express
Air Bill No. 8112 9769 2770 0215
Water Right Services Division
Oregon Water Resources Department
725 Summer Street NE
Suite A
Salem, OR 97301

Re: In the Matter of Water Rights
Application G-18342
He He Properties of America

Dear Sir or Madam:

Enclosed please find the original Protest of Proposed Final Order which is being filed on behalf of Richard W. Harrington and Kathryn T. Harrington, along with this firm's Check No. 52384 in the amount of $810.00 for the fee.

Thank you.

Best regards,

Janet E. Neuman
Senior Counsel

JEN/jw
Encls.
c: (w/encl.) Richard W. Harrington, Protestant
Kathryn T. Harrington, Protestant
He He Properties of America, Applicant
Mark Wiest, Applicant's Agent

RECEIVED
SEP 27 2017
OWRD

039333/00001/8381322v1

GRAHAM Elisabeth A * WRD

From: THOMA Michael J
Sent: Friday, November 04, 2016 2:05 PM
To: Richard Harrington; THOMA Michael J
Cc: IVERSON Justin T; GRAHAM Elisabeth A
Subject: RE: G-15618 Decision Basis

Good Afternoon Mr. Harrington,
Thanks for sending the IR. You are correct that there are not specific details here, but we tend to use specific language for specific decisions. By saying *"not likely be available…without injury…"* it usually means that the Department has found that the proposed rate, in this case 0.402 cfs (180 gal/min), is too much for the aquifer to provide. That is, a well would not be able to provide that high of a rate, continuously, without severely depleting the aquifer or lowering the water levels in nearby wells (injury). "Available Data" does not have to be water-level data or pump-test data, but may simple be geology, well yields, or local knowledge of the area.

I looked at a few other reviews for applications that the Department received in that area around the same time and from what I gathered, in the past there were specific concerns about well-to-well interference or groundwater over-use (perhaps due to recent development in the area or drought or some other regional knowledge – I really can't say what the reasoning was). On one such nearby application we originally proposed to deny the application on the grounds that the use would cause significant injury, but the applicant provided results from an aquifer test that showed there would not be interference with neighbors and we re-reviewed. Our tactic has always been to use the *best available information* to make our decisions, and our findings are rebuttable.

To get to the root of your original concerns over new appropriations in the area, I want to point out that the Department strongly considers the rate the application requests. For example, application G-18342 requested 0.17 cfs (76.3 gal/min) while G-18350 requested 1.96 cfs (880 gal/min). If a well were drilled in your area and was pumping at 880 gal/min it would likely wreak havoc on the groundwater supply. However, 76 gal/min would have a far less detrimental effect, and potentially no effect at all (especially when considering that the well would not be pumped at that rate for much time). Ultimately, for each application, the Department has to make a finding of whether there is a significant concern that the proposed use will injury neighbors or the groundwater resource as a whole.

I hope that helps to answer your question

- Mike

Michael J Thoma, Ph.D.
Hydrogeologist
Oregon Water Resources Department
725 Summer St. NE, Suite A
Salem, OR 97301
ph. 503-986-0845

From: Richard Harrington [mailto:richard.w.harrington@att.net]
Sent: Thursday, November 03, 2016 1:01 PM

Information obtained from the Department of Environmental Quality (DEQ) indicates that the source of water identified in your application is "Water Quality Limited". That means that there are water quality concerns. DEQ will be looking at information from your application to see if additional conditions or restrictions are needed to protect the water quality situation. One possible outcome is that the Water Resources Department will propose in the proposed final order that your application be denied. You are encouraged to contact Tom Melville, (503) 229-5849 at DEQ to discuss the specifics of your application. Often, this information exchange can allow the water use to occur and at the same time keep the water quality situation from worsening.

If you have any questions:

Questions about the status of your application, processing timelines, or your upcoming Proposed Final Order should be directed to our Water Right Information Group at (503) 378-8455 extension 499. Feel free to call me at (503) 378-8455 extension 266 if you have any questions regarding the contents of this letter. Please have your application number available if you call. Address all other correspondence to: Water Rights Section, Oregon Water Resources Department, 158 12th ST. NE Salem, OR 97310, Fax: (503)378-6203.

Sincerely,

Russell W. Klassen
Initial Reviewer

cc: Regional Manager, Watermaster District 13, Water Availability Section
enclosures: Flow Chart of Water Right Process
Stop Processing Form

G-15618
wnb 15-
pou 15-
gw B

Please reference the application number when sending any correspondence regarding the conclusions of this initial review. Comments received within the comment period will be evaluated at the next phase of the process.

Withdrawal Refunds:

If you choose not to proceed, you may withdraw your application and receive a refund (minus a $50 processing charge per application.) To accomplish this you must notify the Department in writing by **Friday, March 15, 2002.** For your convenience you may use the enclosed "STOP PROCESSING" form.

To Proceed With Your Application:

If you choose to proceed with your application, you do not have to notify the Department. Your application will automatically be placed on the Department's Public Notice to allow others the opportunity to comment. After the comment period the Department will complete a public interest review and issue a proposed final order.

If A Permit is Issued It Will Likely Include The Following Conditions:

1. Measurement, recording and reporting conditions:

   A. Before water use may begin under this permit, the permittee shall install a meter or other suitable measuring device as approved by the Director. The permittee shall maintain the meter or measuring device in good working order.

   B. The permittee 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.

   C. The Director may require the permittee to keep and maintain a record of the amount (volume) of water used and may require the permittee to report water use on a periodic schedule as established by the Director. In addition, the Director may require the permittee to report general water use information, the periods of water use and the place and nature of use of water under the permit. The Director may provide an opportunity for the permittee to submit alternative reporting procedures for review and approval.

2. Use of water under authority of this permit may be regulated if analysis of data available after the permit is issued discloses that the appropriation will measurably reduce the surface water flows necessary to maintain the free-flowing character of a scenic waterway in quantities necessary for recreation, fish and wildlife in effect as of the priority date of the right or as those quantities may be subsequently reduced.

3. The tentative priority date for this application is SEPTEMBER 28, 2001.

GRAHAM Elisabeth A

From: Richard Harrington <richard.w.harrington@att.net>
Sent: Monday, October 24, 2016 8:23 PM
To: GRAHAM Elisabeth A
Subject: G-18342

Hi Elisabeth. As holder of permit G-16926, I have several concerns regarding G-18342 and G-18350. The issue of hydraulic interference with my wells may arise at some time in the future. With 3 water users in relatively close proximity pumping ground water, it may be very difficult to establish hydraulic connectivity of the different wells once usage begins and continues year round. However, we are now at a unique time in that Eagle Point Irrigation District has shut down for the winter, meaning that seepage from their canals and infiltration from flood-irrigated fields has ceased. Although locally there has been abnormally high rainfall in the month of October, dry soil has probably absorbed most of this in the relevant non-irrigated lands, such that rainfall has not yet infiltrated to ground water. However, it is currently raining and wet weather forecast for the next week, with longer term forecasts indicating wetter than normal. If Static Water Levels for my well (JACK 2932/34376)), my neighbor to the north (JACK 54779 and 54789), and wells at the former Willamette Egg Farm (JACK 2908, 2909, 2913, 2914, 2916, 2925, 2926, and 30158), now owned by the applicant for G-18350, could all be measured the same day and at some future time a licensed surveyor could determine differences in well head elevations, then the question of hydraulic connectivity could reliably be answered. The approach to water level equilibrium is now at hand, but may soon slip away. The alternative is to wait for a time of water shortage, with the potential for denial of responsibility and a demand for proof of connectivity by the junior water rights holders. This would put an unfair burden on the senior water right holder and waste OWRD staff time in refereeing the matter. Additionally, it would be better for the holders of G-18342 and G-18350 to know the potential for being shut down before substantially more has been invested. As the permitting agency, OWRD has a responsibility to all parties to employ all reasonably obtainable information when considering the granting of permits. Please take action.

Both G-18342 and G-18350 are for "nursery use". The Initial Review for G-18342 indicates this use will be approved. Nursery use allows a 5 month longer usage of ground water than traditional agricultural usage. Propagation by cuttings for the purpose of cloning selected strains is legitimate under ORS 571.005 5), but controlling growing conditions (e.g. light wave length, photo period, etc.) to optimize production of the end product is not. Allowing other than strict nursery usage violates the **principle of prior appropriation**. Please refer me to the OWRD policy directive, memorandum, or statutory authority under which year round production of mature marijuana for sale would qualify as "nursery use". If these applications are approved, how will the OWRD ensure that usage during the winter months will be strictly limited to propagation and not production of an indoor commercial field crop?

Thank you, Richard Harrington

GRAHAM Elisabeth A * WRD

From: WALLIN Timothy * WRD
Sent: Monday, December 05, 2016 11:20 AM
To: GRAHAM Elisabeth A * WRD
Subject: FW: Amendment of G-16926
Attachments: G-16926 120516.pdf

For file

From: Richard Harrington [mailto:richard.w.harrington@att.net]
Sent: Monday, December 05, 2016 10:44 AM
To: WALLIN Timothy * WRD
Subject: Amendment of G-16926

Hello Mr. Wallin. If you are still the Water Rights Program Manager, then this email is for you; if not, please forward it to the current Manager.
In submitting comments on the Initial Review for Application G-18342 recently, it became clear to us that the prospects for developing the quantity of water allowed in our Permit are really quite speculative. But more importantly, we are concerned that the the Conditions of our permit are inadequate to prevent a disaster for exempt well users in our area in the event of a drought, but possibly even in normal years. Attached is a PDF explaining our rationale.
Thank you, Richard and Kathryn Harrington

In 2011, we applied for a groundwater right to irrigate 40 acres near Eagle Point, and received Permit G-16926. Our hope of obtaining a sufficient quantity of water for irrigation was based upon well driller's logs and air test results, which were in some cases impressive. We also had the results of a 4-hour test pump of our well, but no water level measurements past the first 15 minutes. In 2011, the Water Resources Department (WRD) knew no more than we did about the prospects for successful water development in this area as evidenced by the **Ground Water Availability Remarks**:

"There are 26 well logs on record for 35S/1W-28. Reported yield ranges from 0 to 225 gpm (many are air tests which can over estimate pumping yields), median yield is 20 gpm. The pump test showed JACK 2932 has an above median yield. Water level data are sparse for this area, with the nearest well with useable time series data located over a mile away. In Section C of the application, the applicant proposes monitoring static water levels over time to balance use with the capacity of the groundwater resource. In light of the lack of data to otherwise demonstrate the resource's long-term capacity, I think this is a reasonable approach, and recommend condition 7C to capture those water level data annually for seven years."

Additional information has recently come to our attention. As a result, we are concerned that the Conditions of our permit may be inadequate to prevent drying up of our own domestic water supply and that of our neighbors in a drought period.

In the course of commenting on the Initial Review for Application #G-18342, by chance we discovered Application #G-15618, for 0.42 cfs, filed September 28, 2001, by the former owners of the adjacent property to our north, the Johnsons. It was denied at the Initial Review stage. Although most (but not all) of the file for this application has been destroyed by the WRD, we fortunately have some additional information on the matter from the files of Water Rights Surveyor Hollie Cannon, agent for the Johnsons. Following the denial, he contacted the WRD. He wrote to the Johnsons on March 19, 2002:

I discussed you[r] filing with Mr. Doug Woodcock of the Water Resources Department today. The reasons for the unfavorable finding in the "initial review" are
1) There have been well problems in the past with the geologic formation that your wells are located in.
2) There are neighboring wells close by.
3) There is evidence of well decline in the area.

It is doubtful that the "well problems" and "evidence of well decline in the area" can be reliably reconstituted from anyone's memory some 14 1/2 years later. However, reviewing precipitation records from the National Weather Service in nearby Medford, not surprisingly the Water Year from October 1, 2000, to September 31, 2001, was the third driest in the past 50 years. While this cannot be proven to be the sole cause of the "well problems", it was possibly a major contributing factor. Another possible factor was the use of water by the nearby Willamette Egg Farms (WEF). Under an "industrial use" exemption they would have been allowed 5,000 gallons per day (gpd), but on two tax lots they might have claimed 10,000 gpd. Pumping this amount for 365 days would amount to 11.2 acre feet. Because the WEF ceased operations at the Eagle Point facility in 2010, it is no longer a factor in future drought considerations. But since our permit is for 100 acre feet/year (almost 9 times 11.2 acre feet), we are naturally concerned that in a future drought our allowed duty may result in area "well problems", including for our own domestic well.

Some hint of the WEF's usage is found in a June 23,1998, document: **DEQ Site Assessment Section Strategy Recommendation**. This is a DEQ document generated as a result of a vehicle leaving Highway 62 and crashing into a chemical storage building at the WEF. At the bottom of page 4 is discussed the possibility of contamination to groundwater:

"Groundwater pathway: Groundwater is used on the site from six moderately deep to deep water supply wells (100 to 200 feet in depth). the wells were installed on the site in the 1960s and 1970s. A representative of Willamette Egg Farm reported that two of the wells are actively used to supply process water and drinking water (for both chickens and site workers) for the site. Approximately 80 percent of the water used on the site is used for drinking water for chickens. The other four wells are not currently in use. These well[s] are considered backup wells to the two main water supply wells." (Emphasis added).
http://www.deq.state.or.us/Webdocs/Controls/Output/PdfHandler.ashx?p=ff940615-e62d-4e8b-8c75-e980618d36capdf&s=Strategy%20Recommendation%20ECSI%202226.pdf

Taking that information at face value, then viewing a WEF youtube video (https://www.youtube.com/watch?v=bXf240jpTI8), showing their chickens drinking water from metal tubes (with no waste), it is believable that the facility could have operated on 11.2 acre feet per year.

If the WEF was taking as much as 100 acre feet, then we may not have a problem in most years, because after 2001, on through 2010, when WEF operation ceased, there were no drought years and apparently no local area well problems (at least none were raised as an issue when we applied in 2011; but on the other hand, the Johnson denial was apparently ignored in the processing of our application).

However, since we do not know the actual usage by the WEF before and during the drought of 2000-2001, nor the current annual total usage by the potentially affected domestic users (expected to be greater than 15 years ago), we cannot predict with confidence that 100 acre feet used in one irrigation season will not create a problem in the following year should the water year beginning near the end of the irrigation season be similar to 2000-2001. However, if the WEF was only pumping about 11.2 acre feet, then our 100 acre feet pumped the year before a drought is likely to create serious domestic well problems the following year (assuming, of course, that our wells are hydraulically connected to the same problem wells that led to Johnsons' denial). Furthermore, if the WEF was taking only 11.2 acre feet but we pump 100 acre feet, it is possible that, even in normal years, this 100 acre feet will cause problems.

The WRD requires annual water level measurements and sets benchmarks to guard against the possibility of over appropriation by individual water right holders. We were fortunate to have our well, JACK 2932, used as a WRD observation well beginning in 2012. It should be emphasized that with the exception of 0.6 acre feet used in May/June of 2013 and 0.8 acre feet in May /June of 2014, the only water use during these 4 years was the unknown amount for local domestic usage (the WEF having shut down in 2010), which may have varied from year to year depending upon how summer heat, humidity, and precipitation affected yard and garden needs. Thus we have the luxury of an established SWL baseline before measured usage begins.

Well	Date	Time (PST)	Hold	Tape Missing (-)	Cut (+)	Tape Stretch (+)	WL	BMP	MP NBR	MP Correction (-)	WL	BLSD Method	Status	Measured By	Comments
Harrington	10/12/2012	1510	40	20.38	3.3	0		22.92	1	1.25	21.67T		S	SLH	
Harrington	03/25/2013	1034	35	20.38	2.82	0		17.44	1	1.25	16.19T		S	SLH	
Harrington	07/23/2013	1413	45	20.38	1.3	0		25.92	1	1.25	24.67T		S	SLH	
Harrington	10/21/2013	1001	40	20.38	2.45	0		22.07	1	1.25	20.82T		S	SLH	
Harrington	03/19/2014	1300	115	100	1.92	0		16.92	1	1.25	15.67T		S	SLH	
Harrington	07/21/2014	1050	220	200	1.5	0		21.5	1	1.25	20.25T		S	SLH	
Harrington	01/05/2015	1433	270	250	0.06	0		20.06	1	1.25	21.31T		S	SLH	
Harrington	03/31/2015	1302	210	200	3.81	0		13.81	1	1.25	12.56T		S	SLH	
Harrington	07/16/2015	1240													Pumping
Harrington	08/19/2015	1125	270	250	2.45	0		22.45	1	1.25	21.2T		R	SLH	
Harrington	10/07/2015	942	275	250	0.57	0		25.57	1	1.25	24.32T		R	SLH	
Harrington	02/03/2016	1532	205	200	2.5	0		7.5	1	1.25	6.25T		S	SLH	
Harrington	03/09/2016	1211	255	250	3.71	0		8.71	1	1.25	7.46T		S	SLH	
Harrington	07/01/2016	1151	260	250	4.1	0		14.1	1	1.25	12.85T		S	SLH	
Harrington	10/04/2016	1457	265	250	4.15	0		19.15	1	1.25	17.9T		S	SLH	

The above SWL data collected for JACK 2932 by the Watermaster's office has been submitted, but is not yet posted on your website for whatever reason. Although there are data gaps, there is sufficient information to draw at least one important conclusion: that, for this well, March is one of the worst months to compare year-to-year SWL

differences. Typically, November through February are the wettest months. While both ground and surface water flows reflect precipitation timing and intensity, confined groundwater moves much slower because of aquifer permeability and capacity limitations. What appears to be measured in March at JACK 2932 is the variable pressure of confined water moving in an aquifer from Long Mountain to the flatlands below.

Evidence in support of this hypothesis is shown by the following data for JACK 2932:

03/25/2013 16.19T
07/23/2013 24.67T
10/21/2013 20.82T

02/03/2016 6.25T
03/09/2016 7.46T
07/01/2016 12.85T
10/04/2016 17.90T

Over the 7 months from March 25 to October 21, 2013 the SWL dropped 4.63 feet. Over the 7 months from March 9 to October 4, 2016, 10.44 feet. Why?

Looking at the Monthly and Water Year Totals we find something interesting:

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jne	Jul	Aug	Sep	WY Total
2012-2013	1.96	5.10	5.71	0.96	0.49	0.56	1.04	0.69	0.39	0.00	0.42	2.76	19.78
2015-2016	0.46	1.57	7.73	4.22	1.03	2.45	0.96	0.33	0.57	0.45	0.00	0.01	19.78

Both WYs, by chance, had the exact same total precipitation, and did differ in the October SWL by 2.92 feet. But what is interesting is that the 2013 March reading was 16.19, while for 2016, the March reading was 7.46, a difference of 8.73 feet! However the total precipitation from October 1 to the March SWL reading was 14.41 and 14.86 inches for 2013 and 2016, respectively. The Monthly Totals can be misleading in that if the rate of precipitation exceeds the rate of infiltration, water is lost to runoff. That aside, the bulk of the 2012-2013 precipitation was in November and December; in comparison, for 2015-2016, the bulk was later, December and January. Also interesting is that on February 3, 2016, the reading was higher than March (6.25 compared to 7.46). This is consistent with the idea that there are groundwater peak flows in response to rainfall events: the earlier groundwater flow peak resulting from precipitation of the 2012-2013 WY probably had since passed by the March 2013 measurement. Further evidence of the unreliability of inflated March SWL readings due to peak flows is the fact noted above: that while the WY Totals were the same, the March to October 2016 difference in SWLs was over twice that in 2013 (10.44 compared to 4.63 feet).

Data from the 2014-2015 WY unfortunately lack October 2014 and 2015 readings, but nevertheless do support the hypothesis of transient peak underground flows:

01/05/2015 21.31T
03/31/2015 12.56T

Here we had 6.82 inches of precipitation from October 1 to January 5; then an additional 5.9 inches from January 6 to March 31. The hydrologic response—a rise of of 8.75 feet in the water level between January 5 and March 31—is arguably the measurement of a flow peak, not a "static" water level upon which conclusions can be drawn about year-to-year changes in the water level.

Another comparison consistent with the peak flow hypothesis comes from comparing
October 1 to March (date of measurement) precipitation totals with March SWL Measurements:

	(inches)	March SWL (feet)
10/01/2012-03/25/2013	14.41	16.19 feet
10/01/2013-03/19/2014	9.48	15.67
10/01/2014-03/31/2015	12.72	12.56
10/01/2015-03/09/2016	14.86	7.46

Here it is obvious that there is no relationship at all between March SWLs and the precipitation totals from October 1 to the date of SWL measurement.

It should be re-emphasized that with the exception of 0.6 acre feet used in May/June of 2013 and 0.8 acre feet in May /June of 2014, the only water use during these 4 years was the unknown amount pumped by area domestic wells. That these SWLs vary by as much as 8.73 feet supports the idea that March readings are of no value in year-to-year water level measurements for this well.

As an alternative to March, consider the October measurements and precipitation totals for the preceding water year (ending September 30) :

	(inches)	Oct. SWL (feet)
10/12/2012	17.70	21.67
10/21/2013	19.78	20.82
10/—/2014	15.11	——
10/07/2015	14.54	——
10/04/2016	19.78	17.90

Here it is seen that the difference between the 2013 and the 2016 October measurements is 2.92 feet, compared to a difference of 8.73 feet between the 2013 and the 2016 March measurements. Clearly the October measurements are preferable because the uncertainty introduced by peak flows is eliminated. However, October is not necessarily the perfect month because irrigation water use up until October 31 affects the SWL as a well slowly recovers from recent pumping (note the measurement on October 7, 2015 is not reliable because the well was recovering). The measurement made January 5, 2015, of 21.31 feet, suggests that measurement sometime in November, after pumping has ceased, but before fall precipitation from the recharge area has arrived at the observation well, might be the optimal time for year-to-year measurements of decline or gain.

The October data suggests a stable SWL under the current domestic usage, possibly even a modest gain. Yet to be determined is the impact of the annual withdrawal of 100 acre feet. If 100 acre feet is small compared to the total aquifer stored volume, then annual SWL measurements should remain relatively stable. If, on the other hand, 100 acre feet represents a large percentage of the aquifer stored volume, then the SWL should drop significantly following the first year of pumping.

How much decline is prudent if domestic wells are to be protected in the event of a drought? Here we are in 2016, and no one knows much about the subject aquifer. Is allowing a steady decline of 3 feet per year for 5 years prudent? We would argue that if precipitation is normal, such a decline would indicate that the groundwater resource is over- appropriated and pumping should not be allowed to continue into year 4. Under what conditions would it be prudent to allow pumping to continue following a measured decline of 24.99 (or 24, or 20) feet in a single year? Should irrigation in April be allowed following a 24.99 foot decline measured in March even when it is obvious that we are in a drought based on WY to date precipitation? Based on the Johnson circumstances we would argue no. We do not find the water level measurement Conditions in our Permit reassuring if protecting domestic users is a priority.

We do not have any suggestion for permissible water level decline benchmarks because there is no data upon which to base them. The best we can do is to pump; note metered volume; allow to recover; measure the SWL; assuming a linear relationship, predict the SWL if the estimated amount of irrigation volume needed to bring the crop to maturity were to be pumped; if predicted SWL is unacceptable, terminate part of crop. This may seem like an overly timid approach, but again, we know very little about the capacity of the aquifer. Until we know more, we believe caution is advisable.

This timid approach needs to be viewed in the context of the lack of pumping data for the subject aquifer in spite of some very promising well driller air tests; also in the context of the reasons for Johnsons' denial; and in the context of the following taken from page 49 of the Rogue River Basin Study, WRD, January, 1985:

"Overall, the Rogue River basin has limited ground water resources. The potential for developing ground water in excess of single residence domestic supplies is slight throughout the basin. Chances of obtaining yields adequate to supply limited irrigation projects are better in those aquifers below low relief terrain along or near valley floors where most development occurs. There are several areas where significant amounts of groundwater are present in storage, but most of those aquifers are hydraulically connected to the local surface water supplies.

Generally speaking, large water users should not expect to have their needs satisfied solely from ground water supplies. In heavily developed urban or agricultural areas where greater use of, and reliance on, ground water exists or is anticipated, comprehensive aquifer studies are needed. These studies can help determine the effects that large withdrawals might have on surface water resources and other wells in the surrounding area as well as aquifer characteristics, areal extent, and sustainable yield.

Rural residential development has been rapidly increasing throughout the basin over there past 20 years, relying on ground water where surface water supplies are of unreliable quantity or quality. Although "dry holes" are not uncommon in some areas of the basin, sufficient quantities of ground water usually exist to satisfy the needs of single family domestic users.

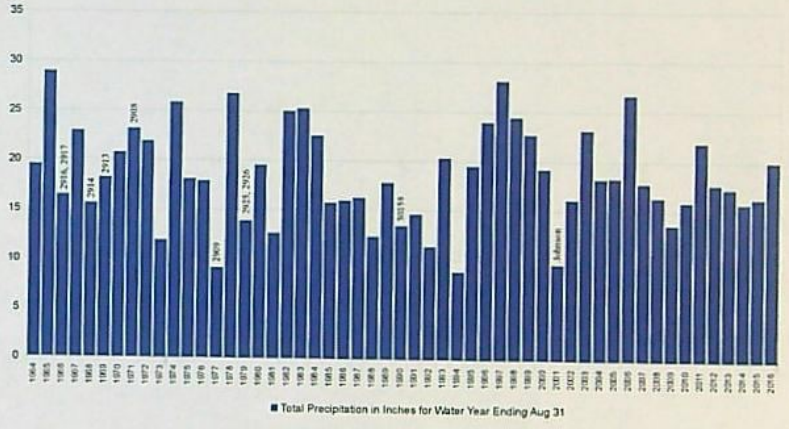
Most of the rock formations in the Rogue River Basin yield only small amounts of ground water. This occurs because most formations have little or no primary porosity so wells must rely on secondary porosity, or fractures. Wells drilled in volcanic and sedimentary rocks typically have fairly low yields."

Now that there are 4 years of SWL data showing the unreliability of March SWL measurements, now that the Johnson denial has come to light showing the danger of over-appropriation, **we are requesting that the Conditions of our permit be amended in order to better protect senior exempt users**.

Below is a bar graph of Medford National Weather Service precipitation arranged by September 1/August 31 Water Year, (which I personally prefer over October 1/ September 31 because in some years September is the start of the wet season). Numbers above the bars are the WEF JACK well numbers and the year wells drilled. Also indicated is the year Johnson drilled and applied for a permit. Note from 2010 to 2016, no precipitation extremes; and from 2001 to present no drought years.

Richard and Kathryn Harrington

December 5, 2016



Comments Regarding The Initial Review for Application G-18342

My wife and I are the holders of Permit G-16926, which allows the diversion of 100 acre-feet for the irrigation of 40 acres (2.5 acre-feet per acre) at a withdrawal rate of 0.34 CFS. On July 15, 2016, He He Properties of America submitted Application G-18342 to appropriate 90 acre-feet of groundwater on property contiguous to ours near Eagle Point, Oregon. The Initial Review (IR) concludes that "[t]he appropriation of 0.167 CFS of water from Well 1 in Hog Creek Basin for year round nursery use on 30.0 acres is allowable." They will be allowed 120 acre-feet (4 acre feet per acre). We believe that the IR erred in its conclusion.

Affected Area Background Information

In 1870, Civil War Veteran Marvin Wood built a house on the site now occupied by the former Willamette Egg Farm (WEF), a little over 1/4 mile from the Point of Appropriation (POA) for G-18342. In 1946, when Highway 62 was widened, the house was moved to the other side of the highway. Details on the original well are not recorded, but given the well technology of the time, it had to have been a hand dug well, suggesting the development of a spring. On our property is an impressive 6 foot diameter hand dug well. The first 4 feet is encircled in concrete which extends a foot or so above ground level, and below the concrete the walls are fractured rock. The date of construction is unknown, but it is likely over 100 years old. Twice in the last 5 years the well was almost filled to the rim of the concrete. Both years I got stuck in the mud with my tractor when attempting to disc weeds immediately down slope from the well . This well was likely constructed at the site of a spring, because just uphill I have found Native American artifacts consisting of stone flakes and discarded arrowheads that did not meet quality standards, suggesting a camp site near a spring. About 1/4 mile distant is the site of a seasonal seep where numerous matates for grinding seeds have been found, indicating another Native American water source campsite. I know of 2 other seasonal groundwater discharge sites within the same 1/4 mile radius, plus one more northeast of the WEF. These localized discharges indicate breeches in confined aquifers.

The oldest domestic well log found by searching the WRD website for Sections 27 and 28, T35S, R1W is dated 1958. Searching for sections 27 and 28, one finds logs for dry wells, logs for hole deepening and liner installation—inflating the estimate of the number of wells potentially affected from aquifer overdraft if one counts only the number of well log entries. On the other hand, there are wells for which a log is not listed, either because they predate well log filing, or because of noncompliance with filing requirements—deflating the estimate of the number of potentially affected wells. My domestic well, probably drilled between 1968-1972 has no log on file. My neighbor also has a domestic well not on file that probably predates record keeping. This lack of accuracy is moot, however, because the number of exempt wells in the area potentially affected by overdraft is at this point unknowable because the geographical area dependent upon the affected aquifer is itself unknown. The unknown aquifer is somewhere between very local up to something on the scale of the Ogallala aquifer. Obviously the recharge area is also unknown. Nothing is known—there is insufficient data to draw any conclusions about the aquifer at this time except that it is confined.

In addition to the domestic exempt usage, up until recently there was also an "industrial use" exemption under which the WEF operated. This exemption allows 5,000 gallons/day (gpd), but since the business had facilities on 2 tax lots, they may have been allowed 10,000 gpd. The first well log recorded for the WEF is dated 1966. It is noteworthy that pumping just 6.94 gallons/minute (gpm) for 24 hours produces 10,000 gpd. It is also noteworthy that between 1966 and 1990, the WEF drilled at least 9 wells. Based on baler and air driller tests ranging from 30 to 250 gpm, any one of their wells could have supplied 6.94 gpm. One possible explanation for the well drilling overkill is that the gpm estimated on the basis of a 1 or 2 hour well driller test might be a gross overestimate of the aquifer(s) actual ability to deliver on a sustained 365-day basis. Another possible explanation for the large number of wells drilled is that the WEF may have been using much more than the 10,000 gpd allowed. The WEF discontinued operation of its Eagle Point facility in the summer of 2010, and in 2011 buildings were being torn down. The property was sold in the summer of 2016 to XP Investments which filed Application G-18350.

When we applied for a water right in 2011, there were no significant groundwater rights on record within the general area. The only information hinting at the quantity of water that might be available was that from drillers' air tests and from a 2003 4-hour metered test pumping of our well, the only known test pump data in the area. However, the water level was not measured beyond the first 15 minutes, nor the time required to reach a new SWL, nor was a new SWL determined. The availability of water in sufficient quantity for the perfection of our permit is therefore only speculation.

The local Watermaster's office has measured the static water level in our well over the past 5 years, but not every year. Since 2010 there has been no WEF usage, so with the exception of my metered use of 0.60 acre feet in 2013 and 0.80 in 2014, these data document the seasonal variability in the SWL in my well solely attributable to exempt domestic wells and natural processes.

Discussion of Groundwater Availability Remarks

The WRD document: The PUBLIC INTEREST REVIEW FOR GROUNDWATER APPLICATIONS, B3. Groundwater availability remarks (GARs) states that: *There are 47 well logs on file for Sections 27 and 28 combined, indicating moderate groundwater development for small exempt uses.* This observation is of no value in determining groundwater availability. As pointed out above, the tallying of well logs is not accurate because of reporting issues. But more importantly, even if all wells are accurately reported, because the extent of the aquifer dependent area is unknown, such a tally is a meaningless exercise.

Static water level data are sparse but suggest reasonable stability in the subject aquifer (see hydrography).

The SWL data are indeed sparse. There are two sources of this data. One consists of well drillers air and baler tests, which are of limited accuracy because of the limitations of the measurement methodology, and because the process of cleaning the well of cuttings during drilling draws water from the aquifer, so that a true "static" measurement is questionable. In addition, such data is reported for different years and for different months of the year, so are only very roughly comparable.

The second source is the data collected by Shavon Haynes of the Jackson County Watermaster's office beginning in August of 2011. These measurements do indeed "suggest reasonable stability in the subject aquifer". With the exception of my use of 0.60 acre feet in 2013 and 0.80 in 2014, the variability measured represents variable annual recharges, exempt well usage, and hypothetical natural spring discharges exiting the Hog Creek Basin. The limited data documents that the annual exempt user demand has not exceeded the average annual recharge capability over the period of monitoring. But, the data provides zero information as to how many additional acre feet are available in excess of the current demand such that the average annual recharge is capable of maintaining a stable (not trending downward) SWL.

There may be available water, or there may not. The 5 springs/seeps previously noted to be active in some years represent what? Probably leaks in the temporarily overloaded underground "streams" as water is moving downgradient from Long Mountain. None of these run more than a few feet from their source, then reenter the "aquifer" in a manner comparable to river flood waters—the water is not lost but is temporarily stored . From springs such as these the net loss to groundwater is only from evaporation and immediate area plant use. The only water in excess of the current demand would be water that discharges from unknown springs to a stream that drains to the ocean: maybe Hog Creek, maybe Little Butte, maybe the Rogue. Do such hypothetical springs discharge under current usage? Nobody knows.

On the other hand, the recharge area may be far larger than the potentially affected area, and the "aquifer" in question may be large enough to provide my permitted 100 acre feet, plus the 120 proposed to be approved, with no measurable downward trending SWL. Nobody knows.

In addition, aquifer recharge may not be limited to precipitation. The Eagle Point Irrigation District (EPID) may be a contributor in 3 ways: 1), from infiltration from flood irrigated lands; 2), from nearby irrigation laterals dug into permeable fractured bedrock; and 3), from leakage of the EPID irrigation canal carrying around 100 cfs that originates near Butte Falls and traverses many miles of mountainous terrain before reaching the lowlands near Eagle Point for distribution. The net effect of these—nobody knows. To the extent that EPID is a factor in this aquifer's water supply, in drought years EPID is forced to reduce allocations to conserve water in Willow Lake given the unpredictability of future water years, so in drought years EPID may be a much reduced contributor.

Groundwater will likely be available within the capacity of the resource.... (Initial Review Determinations # 4.) As previously noted, the limited SWL data begins in 2011, a full year after the WEF closed down, so we can not measure the impact of that usage on the SWL. As also previously noted, there is no information on the WEF's actual usage, but considering the number of wells it drilled, its usage may well have been in excess of 10,000 gpd (11.2 acre feet/year). If usage was in great excess of 10,000 gpd, then the water formerly used could now (post 2010) be wasting to the ocean via springs as indicated by the relative stability of the SWL (not trending higher) and this water could be available for appropriation. Another possibility might be that the subject aquifer is very large, in which case the SWL may be little affected year-to year by the appropriation of an additional 220 acre feet.

G-18342

Maybe, but a review of Johnson suggests otherwise. By chance, we were recently surprised to discover that we were not the first to apply for groundwater rights in this area. In 2001 Jim and Violet Johnson drilled a domestic well at a site on their contiguous property, about 3/16 of a mile from my permitted well. Apparently encouraged by the air test of 80 gpm, they drilled a second well less than 6 weeks later for the purpose of obtaining an irrigation right. This second well air tested at 100 gpm. Their application (G-15618) was received 24 days after the second drilling. Without offering any alternative to "the amounts requested", the IR rejected their request, stating:

"*The Department has determined, based upon available data, that the use of groundwater from the proposed wells* ***will not likely be available*** *in the amounts requested without injury to prior groundwater rights and/or within the capacity of the groundwater resource.*" [Emphasis yours.]

So, what was the "available data" upon which this denial is based? The file for G-15618 has been deleted from the WRD data base, but G-15618 is still listed and indicated "denied". So the trail goes cold...but not completely. As mentioned above, we learned of Johnsons' denial by chance. In a conversation with Water Rights Surveyor Hollie Cannon about filing the necessary paper work to perfect our permitted water right, he shocked us with the information of Johnsons' application and denial next door in 2002. Without his memory and retained files, we would be oblivious to this important information relevant to the capacity of the subject aquifer.
Because the file for G-15618 has been destroyed, it is not possible to review the Groundwater availability remarks for such, nor the "available data" upon which the determination was based. However, we do have the Initial Review and a letter from Mr. Cannon to Mr. Johnson dated March 19, 2002. He wrote:

I discussed you[r] filing with Mr. Doug Woodcock of the Water Resources Department today. The reasons for the unfavorable finding in the "initial review" are
1) There have been well problems in the past with the geologic formation that your wells are located in.
2) There are neighboring wells close by.
3) There is evidence of well decline in the area.

This is very interesting and important new information for several reasons. To restate the above: neighboring domestic well owners dependent upon the volcaniclastic aquifer in question contacted the WRD with complaints about their domestic wells running dry in 2001. Whether these complaints were in response to Johnsons' application (unknown if complainants were aware of Johnsons' application), or whether timing of the complaints was coincidental is unknown, but since the file has been destroyed, we shall never know. However, in the first paragraph of page 3 of that IR is noted that DEQ found that "the source of water identified in you application is "Water Quality Limited". Without contacting the DEQ we have no idea as to the parameters of concern. it would be logical to presume that since the WRD was raising this as an issue in support of its denial of G-15618—namely that this water appropriation would significantly impact the concentration of pollutants by the lack of dilution and therefore water quality—then complaints about groundwater levels were not made up. In any event, the WRD took the well owners seriously enough and denied the application.

By organizing monthly precipitation records from the National Weather Service station at the Medford airport into October-September water years (WYs), we find that the 2000-2001 WY was exceptionally dry [Johnsons' unfortunate application timing could not have been much worse]:

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jne	Jul	Aug	Sep	WY Total
1999-2000	1.72	1.94	0.89	5.00	2.76	1.52	3.59	0.75	0.43	0.58	0.07	0.38	19.63
2000-2001	1.51	1.24	0.98	1.00	0.82	1.55	1.15	0.40	0.38	0.19	0.03	0.79	10.04
2001-2002	0.19	4.16	4.35	1.59	1.65	1.33	1.49	0.53	0.03	0.08	0.00	0.53	15.93
2009-2010	0.65	1.22	1.81	2.77	1.03	2.10	2.92	1.53	1.00	0.00	0.86	0.79	16.68
2010-2011	2.06	1.94	4.31	1.73	1.23	4.26	2.12	2.20	0.69	0.60	0.00	0.01	21.15
2011-2012	0.65	1.99	0.94	2.76	2.19	3.72	1.92	1.10	2.36	0.07	0.00	0.00	17.70
2012-2013	1.96	5.10	5.71	0.96	0.49	0.56	1.04	0.69	0.39	0.00	0.42	2.76	19.78
2013-2014	0.20	1.12	0.36	0.78	4.55	3.50	0.82	0.47	0.54	0.10	0.63	2.04	15.11
2014-2015	2.59	1.95	2.28	1.25	3.20	1.45	0.60	0.33	0.31	0.29	0.04	0.25	14.54
2015-2016	0.46	1.57	7.73	4.22	1.03	2.45	0.96	0.33	0.57	0.45	0.00	0.01	19.78

The reason for the reported well problems almost jumps off the page—drought. A correlation between precipitation and groundwater SWL is not unexpected, but what is so very interesting is that the domestic users felt the impact so quickly, that there was not a year or more of grace provided by reserves from 1999-2000, considering that most domestic pumps are set relatively deep compared to the SWLs that have been reported by the Watermaster beginning in 2011. This strongly indicates that the capacity of the aquifer in question is far less than we all would like, that at any time we are only one year away from drought conditions adversely impacting domestic well users. Two drought years, huge trouble for domestic users. It is painful to even think about it. Well deepening does not create water, and is not cheap, nor is the associated pump retrofitting and manipulations, to say nothing of the nightmare of buying water by the truck load, disinfecting and integrating it into the plumbing system.
Not exactly the same as Flint, but very close!

It is also important to consider that the WEF's water use is unlikely to have been reduced due to the 2000-2001 drought. Not knowing its actual usage, we cannot know the WEFs impact on the "well problems". If it were only using 10,000 gpd (11.2 acre feet/year), then the aquifer capacity is precariously small and cannot withstand even my 100 acre feet allocation in an average year. On the other hand, it is hard to imagine how thirsty chickens, egg washing, pen cleaning operations and cooling could use an amount approaching 220 acre feet, or even 100 acre feet. Scaling the chicken raising buildings from the Google Earth view on my computer screen, I estimate that the chicken occupied buildings occupied a total of 3.3 acres. Dividing 100 acre feet by 3.3 acres gives a height of 30 feet of water for the chicken rearing area that would have been used per year. Unlikely and unbelievable. This suggests that in a sub-normal WY my 100 acre feet alone is more than likely grossly excessive; an additional 120 acre feet on top of that should be totally out of the question. What amount can be safely allocated without jeopardizing domestic users in a one year drought? At this time, nobody knows, but it is probably less than 100 cfs.

Did the WRD consider the Johnson denial in the IR for G-18342? If no, why did it ignore this precedent, because a minimal record G-18342 is still in its data base? This additional information must be considered in the decision process. **Johnson requested 0.42 cfs, and was denied; with the approval of G- 18342 the total appropriation would be 0.507 cfs. What is the source of this additional water not available in 2002?**

Interference

Well-to-well interference is unpredictable in fractured rock aquifers because fractures are not continuous or consistently connected, so there is some uncertainty regarding the potential for interference with the nearby senior groundwater right.
We do not dispute this, but disagree on how to detect and evaluate the potential.

On October 24, I sent a request to Elisabeth Graham (caseworker authoring the IR) requesting that the SWLs of the existing wells of the former Willamette Egg Farm, my well, and wells of my neighbor to the north (the Johnson wells) be measured in order to determine possible hydraulic connectivity before wet season recharge becomes a factor in SWL measurements. If, at this time of the year (now), when inflow and outflow to the subject aquifer(s) is minimal, SWLs adjusted for well head elevation differences should reveal whether one, or more than one aquifer services these wells for which there is "some uncertainty regarding the potential for interference". Such measurements will never again be possible once wet season impacts the water table and my irrigation season use and year-round withdrawal under "nursery use" begins. I received no response to my request.

The requested SWL measurement data would provide information useful for understanding the hydraulic connectivity between the wells, reducing some [of the uncertainty. If SWL differences are beyond what can be attributed to the slow asymptotic approach to equilibrium due to permeability limitations of the bedrock and the diminishing rate of transport as SWL pressure differences between distant wells diminish, then that would be evidence that the wells are serviced by different (or at least very poorly connected) aquifers. Since water usage at the WEF facility is not now permitted beyond exempt usage (no longer industrial), and exempt usage in the vicinity of my and the Johnson wells is currently seasonally reduced to household uses (that largely returns to groundwater via the septic systems), if there are not significant differences in SWLs proposed to be measured, then it could be concluded that in the area extending from the WEF to the Johnson wells we are dealing with one aquifer. The He He property lies between these two areas.

Since we are not doing that suggestion, how about one from the WRD. In the 2002 letter from Hollie Cannon to Jim Johnson, Hollie details what he learned from Mr. Woodcock about how to proceed if the Johnsons wished to try to continue in the face of the denial:

The information needed to proceed with the filing is
1) Information on adjacent well (location and well logs)
2) Pump test one of your wells to determine the effect on neighboring wells.

The test pump procedure is to get access to the neighboring well. Pump your well for up to eight hours. Measure the draw down in your well and the neighboring well during the test pump. Then after the test pumping is done continue to measure the water level in the neighboring wells to determine how much water can be withdrawn without harm to the neighboring wells.

Once the WRD has this information they will determine how much water can be withdrawn without harm to the neighboring wells.

Under certain conditions this test pumping could definitively resolve the issue of interference. If there were no drawdown, the matter would be settled. If there were drawdown, then the wells are connected and the only question is the rate of drawdown in the passive well. That sounds good. But there are conditions under which the test results would not be acceptable as a basis for quantifying how much water can be withdrawn without harm to the neighboring wells. For example, when the aquifer is actively recharging from infiltration in the uplands during the wet season, wells such as mine at a higher elevation may register the peak of the recharge flow sooner than wells at a lower elevation in the same way that towns on a flooded river will experience the flood crest in the order determined by their respective locations on the river. When the aquifer is spilling water to the surface (such as described above when I have gotten stuck in the mud on my tractor near the overflowing developed spring due to excess pressure in the aquifer) interference test pumping will be unreliable because the drawdown and recovery in both wells will be distorted compared to the dry season (when the down slope recharge flow is greatly reduced and the SWLs in the wells are relatively stable). [See 2) below]. An additional consideration is that the pumped water be discharged at a sufficient distance from the well to eliminate the possibility of rapid return to groundwater during the pumping and recovery.

The difficult question would be, how much interference based upon the test pumping would be acceptable? Referring back to the 2000-2001 domestic well problems, it is clear that the storage capacity of the aquifer can be depleted below an acceptable level in just one dry year. The only unknown is how much water the WEF was taking. Again, if it was 11.2 acre feet (10,000 gpd), then clearly the issue of potential interference between water right holders is not an issue, because there probably is not enough water for the withdrawal of any fraction of our senior right if we are to avoid placing the domestic users (senior to all irrigation rights) in jeopardy. In the unlikely event that the WEF was taking 100 cfs, then clearly our 100 cfs is too much and must be scaled back in order to avoid going into the wet season with the aquifer depleted below some prudent SWL benchmark (during the irrigation season, not the following March) yet to be determined. In other words, the only interference issue is between the senior exempt users and the Harringtons, not between the Harringtons and He He, taking us back to the basis for the 2002 Johnson denial.

As a practical matter, in the IR proposed approval of He He, the WRD says:

The proximity to neighboring POAs raises the potential for interference with senior groundwater users, ***but pumping drawdown effects in a fractured aquifer are not expected to be widespread.*** [Emphasis mine.]

With almost totally unknown parameters to describe the subject aquifer, in view of the potential harm to the senior exempt users, such a statement is indefensible and irresponsible. On what data is this expectation based?

The WRD's remedy for this lack of a data/information based decision: Annual water level and water use monitoring and reporting is recommended to address the potential impact to senior users. Unbelievably inadequate.

As a condition of the permit:

The Department may require the discontinuance of groundwater use, or reduce the rate or volume of withdrawal, from the well(s) if any of the following events occur.

D. Hydraulic interference leads to a decline of 25 or more feet in any neighboring well with senior priority.

Problems with this remedy are several:
1). Frequency of measurement. SWL measurement is stipulated to be annually, in March. In a hypothetical year, if both we and He He pump throughout the irrigation system following the March measurements, but SWL measurements are not made again until the following March, given that we know very little about the capacity of the aquifer except that domestic wells reported problems in 2001/2002, then reaction to measurements made the following March may be too late to prevent an overdraft already happened that will be felt in the ensuing dry season even in a "normal year", to say nothing of the unthinkable possibilities from a dry winter preceding the following year March measurement.

2) Time of year. March is possibly the worst month for detecting interference. Typically, November through February are the wettest months. March may possibly be the month when aquifer recharge is at its peak depending upon the wet season precipitation timing and intensity and the groundwater flow rate from the uplands. SWLs determined at different wells on the same day are subject to "crest" differences in the same way that towns on a river experience crests displaced in time. To complicate this uncertainty from peak flow location differences, He He will be impacting SWLs year round, making interference interpretation of SWL measurements even more speculative. Ideally, annual SWLs should be measured at the time of year when, absent human activities, equilibrium would be reached. It most definitely is not March.

Evidence in support of my hypothesis that March SWL measurements are unreliable because of underground flow peaks is shown by the following data collected by Shavon Haynes from my well, JACK 2932:

03/25/2013 16.19T
07/23/2013 24.67T
10/21/2013 20.82T

02/03/2016 6.25T
03/09/2016 7.46T
07/01/2016 12.85T
10/04/2016 17.9T

Over the 7 months from March 25 to October 21, 2013 the SWL dropped 4.63 feet. Over the 7 months from March 9 to October 4, 2016, 10.44 feet. Why?

Looking at the Monthly and Water Year Totals we find something interesting:

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jne	Jul	Aug	Sep	WY Total
2012-2013	1.96	5.10	5.71	0.96	0.49	0.56	1.04	0.69	0.39	0.00	0.42	2.76	19.78
2015-2016	0.46	1.57	7.73	4.22	1.03	2.45	0.96	0.33	0.57	0.45	0.00	0.01	19.78

Both WYs by chance had the exact same total precipitation, and did differ in the October SWL by 2.92 feet. What is interesting is that the 2013 March reading was16.19, but for 2016, (a year when I got stuck with my tractor; documented in an email that I sent Shavon at the time; I did not get stuck in 2013) the March reading was 7.46, a difference of 8.73 feet! While the Monthly Totals can be misleading in that if the rate of precipitation exceeds the rate of infiltration water is lost to runoff, the bulk of the 2012-2013 precipitation was in November and December; in comparison, for 2015-2016, the bulk was later, December and January. Also interesting is that on February 3, 2016, the reading was higher than March (6.25 compared to 7.46). This is consistent with the idea that there are groundwater peak flows in response to rainfall events: the earlier groundwater flow peak resulting from precipitation of the 2012-2013 WY probably had long passed by the March 2013 measurement. Further evidence of the unreliability of inflated March SWL readings due to peak flows is the fact noted above: that while the WY Totals were the same, the March-October 2016 difference in SWLs was over twice that in 2013 (10.44 compared to 4.63 feet).

This data analysis supports the idea that SWL readings taken when the aquifer is recharging can lead to misleading conclusions about groundwater levels from year to year;

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and interference conclusions based upon spring pumping tests would be unreliable.

3) SWL interpretation. The question of interference is really one of how hydraulically connected are the subject wells? If both users are pumping, and domestic use is also dropping the water table (and may be more connected to (affected by) one of the wells than the other), how will the WRD distinguish the effects of each from the others? Unless the WRD can distinguish the effects of the different users, how will it be able to determine that *[h]ydraulic interference [led] to a decline of 25 or more feet in any neighboring well with senior priority [?]*

4) Arbitrary level of 25 feet. The boilerplate figure of 25 has no basis in any data, information, or fact—it is a prepackaged, off-the-shelf number. The WRD has no data on the capacity of the aquifer, the recharge potential in terms of acre feet, the annual acre feet usage by domestic users…nothing. If an annual (March) measurement finds a drop of 25 feet, it may be too late to prevent the disaster for domestic users in the following months. Additionally, in view of the uncertainty introduced by aquifer recharge flow timing (e.g. the 8.63 foot March difference noted above for WYs with identical total precipitation), a drop of 24.99 feet could actually be much greater than indicated by the March measurements. Where would that leave us? Since we are ignorant of meaningful parameters for this aquifer, who really knows the extent of the potential consequences of this arbitrary benchmark?

As discussed in my application in 2011, for a given well the volume availability/SWL relationship can be answered by plotting the amount pumped versus the SWL drop (measured when recovery is flattening out). We know that the permeability of the volcaniclastic rock is highly variable from well logs. Some very deep holes are dry. Most local productive wells encounter confined water generally below 100 feet, indicating either a confining strata or very low permeability above the breeched aquifer. Breeching a confining strata may create more storage capacity above than was naturally available, but it is what it now is. There is no reason to expect that such a plot would be a straight line. It would give us important information about the aquifer's capacity versus SWL drop. Maybe there is adequate water for everyone above the 25 feet benchmark. Maybe 24.99 feet in March is overly generous going into a summer of domestic and irrigation use. It may be that pumping only 10 acre feet will drop the SWL to 50 feet. Nobody knows what to expect. Without more information we are only guessing. To boldly allow aquifer drawdown with only March to March measurements is comparable to driving a car on a long trip with a broken gas gauge and not keeping track of the miles traveled since the last fillip, nor knowing where the next gas station is located. We do know from 2001-2002 that we do not have a very large gas tank, but how small is yet to be determined.

5) No requirement to do test for interference in IR. Since there is no test for interference required before use by He He begins, as was asked of Johnsons before the WRD would even reconsider their application, the public needs to know why the He He application is being fast-tracked, especially when the combined appropriation for the two permitted right is greater than Johnsons' request (0.507 compared to 0.42 cfs)?

6) Burden of proof. In Johnsons' case, the burden of proof was on Johnsons: they were required to prove that interference was inconsequential. In the present case, He He is required to prove nothing. Since the Watermaster operates on a complaint driven basis, the burden falls upon us to detect possible interference and present evidence that will trigger an investigation of such. During the active irrigation season, we may have to get scheduled on an typically busy calendar, and the lag time between our detection and resolution may be great. We would probably voluntarily cease pumping, but what would He He be required to do until the matter is resolved?

In addition, with 2 irrigation and the domestic withdrawals simultaneous, how does the WRD propose to sort this all out, with crops burning up in the heat and tempers flaring? How long of a shut down would be required? Thus the senior user is being put in a position where hydraulic connectivity is not required to be established before He He's use begins; the senior user must try to detect interference during the active irrigation season; and the senior user is subject to a shut down while the matter is being investigated on a timetable determined by the Watermaster's work load.

7) Acceptable level of interference. Without having a data based benchmark for ensuring that the withdrawal by the senior irrigation user does not jeopardize domestic users, the problem is complicated even further by condition D: *Hydraulic interference leads to a decline of 25 or more feet in any neighboring well with senior priority.* How much hydraulic interference, if any, is acceptable in leading to a decline of 25 feet? In surface water management, upstream junior users are prohibited from diverting water until the downstream senior rights are satisfied. In the case at hand, with an unknown supply of water available in our current state of collective ignorance, water pumped by the junior user early in the season may lead to a shut down of the senior right before its needs are satisfied for that irrigation season. This would be a clear violation of the principle of prior appropriation. Only if it is empirically determined that there is water in excess of the domesticusers and senior irrigation right needs would any interference be acceptable. If the junior contributes to a decline of 25 feet prompting a shutdown of the senior user, that water is not coming back, and the senior user will have been damaged by the junior user with the approval of the WRD.

To summarize interference, the WRD's proposal for detecting, preventing and managing interference is totally inadequate and unacceptable, potentially leading to crop losses and law suits by multiple affected parties.

Water Quality

It was previously mentioned that in its denial of Johnsons, the WRD raised the issue of potential further water quality degradation were their application to be approved:

Information obtained from the…(DEQ) indicates that the source of water identified in your application is "Water Quality Limited". That means that there are water quality concerns. DEQ will be looking at information from your application to see if additional conditions are needed to protect the water quality situation. One possible outcome is that the Water Resources Department will propose in the proposed final order that your application be denied.

This raises some questions. Is the source of water still "Water Quality Limited"? If not, when did it cease to be so? Was the DEQ consulted in the present matter? Why was this issue not addressed in the Initial Review for He He's application?

It is logical that water quality is related to water quantity, as is the clear implication in the WRD quote above. Not knowing any parameters of this watershed, we do know that associated with the drought of 2001/2002 there was a water quality problem that affected the domestic users. We do not know the source of that problem—it could have been from operations at the WEF, it could have been from the leaching of large animal manure into groundwater, it could have been from the failure of septic effluents to dilute and disperse as in non-drought years (if taken to the extreme, the only ground water would be septic effluent). Whatever the source(s), all we know is that there was a probable drought related pollution problem. Does the WRD intend to ask DEQ to set limits on the amount of groundwater that can be withdrawn before water quality becomes a concern?

A further concern is that the He He plans submitted to Jackson County Development Services indicate a parking lot 300 x 720 feet, which is 4.95 acres. In a conversation with the on-site representative of He He, I learned of plans for 50 employees. That number is inconsistent with the parking lot acreage—that would be 10 vehicles per acre if all employees were on the premises at the same time. There may be many more than 50. In any case, this raises the specter of the discharge of septic effluent on a scale for which there is no precedent in this neighborhood's aquifer. Implementation of septic plans approved at the County level based on perk tests may not be taking into account the open ended employee number and the potential for exacerbation of water quality concerns in a drought that were raised for the Johnsons. In a drought situation, will this operation make the neighborhood well water undrinkable even though wells are not dry? We need answers.

Liability

Who will be liable for damages in the event that the WRD allows agricultural users to use more water than the aquifer can safely provide without jeopardizing the domestic users need for uninterrupted safe drinking water? If agricultural users comply with all conditions stipulated by the WRD, are they indemnified from domestic user lawsuits?

Nursery Use

Application G-18342 is for the appropriation of water for "nursery use". We have two problems with the proposed approval under this legal umbrella.

First, as already touched on, a junior user can not use water to which a senior user is entitled. When the traditional irrigation season ends at the end of October, groundwater reserves have been depleted to some level depending upon the carryover from the previous year, the previous wet season recharge, and the irrigation season and domestic

usage history. Since future precipitation events are unpredictable, it is unknown how much water will be available for domestic senior use during he near, middle, and far future. It is also unknown how much will be available for the senior agricultural user beginning April 1. If the junior user depletes the aquifer storage during the 5 months when traditional agricultural irrigation is not allowed, and it is not replenished during the wet season, then the junior user, with the WRD's approval, is in violation of the principle of prior appropriation. Similarly, "nursery use" cannot take water to which domestic users are entitled. Only if there is a surplus is it permissible for "nursery use" to use water during these months. But we have no data based information on what constitutes "surplus". As has been repeatedly stressed, we know practically nothing about this aquifer, therefore the WRD would be ill advised to approve winter use in our present state of ignorance. We must not forget that only one drought year is sufficient to cause problems for domestic users, so the capacity of this aquifer cannot be large, and as yet we have no means to determine a surplus.

Looking at the issue more formally, the "Groundwater Availability Analysis" concluded: *Static water level data are sparse but suggest reasonable stability in the subject (see hydrography). Therefore, the groundwater resource cannot be determined to be over-appropriated.*

"Water Availability Analysis" means the investigation of stream flow or groundwater measurement records, watermaster distribution records, flow requirements of existing water rights, stream flow modeling in ungauged basins, minimum perennial streamflows, or scenic waterway flow requirements to determine if water is available to support the proposed water use.

"Water is Available," when used in OAR 690-310-0080, 690-310-0110 and 690-310-0130, means:
(a) The requested source is not over-appropriated under OAR 690-400-0010 and 690-410-0070 during any period of the proposed use. [Emphasis added].

On the basis of 6 data points (8/12 2011; 3/25, 7/23, and 10/21 2013; and 3/19 and 7/21 2014) it was concluded that *Groundwater will likely be available within the capacity of the resource…even though it cannot be determined to be over-appropriated.* With only two of these measurements barely falling in the "nursery use " window, how can it be concluded that "[t]he requested source is not over-appropriated during any period of the proposed use"?

The Initial Review Determinations states: **4. ,** ***…and if properly conditioned, the proposed use of groundwater will avoid injury to existing groundwater rights.*** However, there are no conditions given that will avoid injury to existing groundwater rights. And yet the year-round appropriation is allowable—based on 6 SWL measurements!

Secondly, we are concerned that water appropriated under the claim of "nursery use" will be used for the indoor cultivation of mature marijuana plants in the winter months.

According to Wikipedia: "A nursery is a place where plants are propagated and grown to usable size." According to my Webster's New collegiate Dictionary, a nursery is "an area where trees, shrubs or plants are grown for transplanting, for use as stocks for budding and grafting, or for sale."

OAR 690-300-0010 30) "Nursery Operations Use" means the use of water for operation of a commercial nursery which may include temperature control, watering of containerized stock, soil preparation, application of chemicals or fertilizers, watering within greenhouses and uses to construct, operate and maintain nursery facilities. The use of water within plant nursery operations constitutes a different use from field irrigation, although that may be a part of nursery use. If used for field irrigation for nursery stock, such use is not restricted to the defined agricultural irrigation season.

There are two points of confusion here: "watering within greenhouses" may be interpreted by some to mean that growing mature commercial marijuana in a greenhouse constitutes "nursery use" just because of the phrase "watering within greenhouses" is what they want to be able to do. A second point of confusion: "The use of water within plant nursery operations constitutes a different use from field irrigation, although that may be a part of nursery use." That statement may be interpreted by some to say that field irrigation is a nursery use. However, that confusion is clarified with the next sentence: If used for field irrigation for nursery stock…. Taking license to use appropriated water to grow mature marijuana year round would seem to derive from the second part of the sentence: "…such use is not restricted to the defined agricultural irrigation season." But, we are just talking about water use for nursery stock that is sometimes grown in a field, not field irrigation for field crops. By granting water rights for "nursery use" when, in fact, the majority of the water will be used for growing mature plants, both indoors and out, seems like a very sloppy reading of the controlling law, (the full implications of which I will not comment on now).

§ 571.005Á5) Nursery stock includes all botanically classified plants or any part thereof, such as floral stock, herbaceous plants, bulbs, buds, corms, culms, roots, scions, grafts, cuttings, fruit pits, seeds of fruits, forest and ornamental trees and shrubs, berry plants, and all trees, shrubs and vines and plants collected in the wild that are grown or kept for propagation or sale.
Nursery stock does not include:
(a) Field and forage crops.
(b) The seeds of grasses, cereal grains, vegetable crops and flowers.
(c) The bulbs and tubers of vegetable crops.
(d) Any vegetable or fruit used for food or feed.
(e) Cut flowers, unless stems or other portions thereof are intended for propagation.(e) Cut flowers, unless stems or other portions thereof are intended for propagation. [Emphasis added].

Mature marijuana is a field crop, albeit a highly pampered one grown in pots. Compare hemp and flax grown for fiber, mint, all field crops. Immature marijuana grown from seed or rooted cuttings is "nursery stock":

§ 475B.015

11) Immature marijuana plant means a marijuana plant that is not flowering.
22) Mature marijuana plant means a marijuana plant that is not an immature marijuana plant.
(27) Propagate means to grow immature marijuana plants or to breed or produce the seeds of the plant Cannabis family Cannabaceae

Here we see that "propagate" is specifically limited to growing immature marijuana plants or mature ones that produce seeds, as **distinguished** from mature ones that are being raised for the unpollenated female flower parts.

The issue may seem academic, but He He is starting out with two 1.2 acre greenhouses; there may be several more planned for the future. As discussed earlier, there is thus far no documentation of water availability for a junior right at any time of the year. It should be emphasized that merely because the agricultural irrigation season is limited to seven months, water during the other five months is not therefore automatically available. No, not before we have data to demonstrate that it is so. Wet season aquifer storage is for the senior users, not for a junior user's winter use merely because they are applying under "nursery use".

When I made my application in 2011, I requested an irrigation season ending November 15 to be able to germinate fall-sown crops so as to avoid frost heaving of seedlings in the event that fall rains arrived late, germination was late, and seedlings were then more vulnerable to heaving. This request was denied. As a matter of fairness, using groundwater past the end of the traditional irrigation season to continue production of mature commercial marijuana under the claim of "nursery use" when such use does not qualify as propagation/nursery use—well that is hard to accept.

Unless there are other controlling Statutes and OARs that I am unaware of, please review your policy regarding "nursery use" with the Attorney General's office.

Other

"Aquifer" confusion in the GARs: *Since the application does not specify a proposed well depth, Codition B2 (c) is recommended to limit well construction to a single aquifer in the fractured bedrock aquifer.* Does this mean that drilling must stop upon the breaching of a confined aquifer as evidenced by water rising in the borehole? How will that be enforced?

Pond: Applicant told me in August that he will build pond and raise fish using the well water. That pond excavation is far along. Pumping groundwater into a pond in an area of high pan evaporation is a questionable use of water. Does the applicant have or need a permit for such?

G-18342

Re-injection well: Applicant also plans to use the proposed well to supply water to a heat exchanger (heat pump) to maintain greenhouse temperatures, then re-inject this water into a second well. While the net use would be zero, does the WRD have any concerns about which aquifer receives the return water in view of the "single aquifer" limit to well construction? We do have a concern that heated water discharged into the bedrock may, due to the increased solubility of mineral salts at higher temperatures, affect water quality for both human and plant watering.

Conclusion

You say: *...the groundwater resource cannot be determined to be over-appropriated.* Using the same data that you presented and more, we say: the groundwater resource cannot be determined to be under-appropriated without more data. Please consider our comments and please take another look at the He He application.

Thank you for the opportunity to comment.

Richard and Kathryn Harrington

GRAHAM Elisabeth A

From: THOMA Michael J
Sent: Monday, November 14, 2016 7:24 AM
To: GRAHAM Elisabeth A
Subject: FW: Found deleted file
Attachments: reconsPDF.pdf; recons.rtf

Good Morning Lisa,

More from Mr. Harrington.
I believe below and attached are his comments on G18342. I may try to read through them.

- Mike

Michael J Thoma, Ph.D.
Hydrogeologist
Oregon Water Resources Department
725 Summer St. NE, Suite A
Salem, OR 97301
ph. 503-986-0845

From: Richard Harrington [mailto:richard.w.harrington@att.net]
Sent: Friday, November 11, 2016 6:39 AM
To: THOMA Michael J.
Subject: Found deleted file

Hi. Yesterday at about 3:00 I went to the comment window but obviously could not retype my comments on the IR for G-18342 into the window because of the length. I tried to attach the file as a pdf and as a TextEdit file (Apple word processing software), but they would not go into the window, rejected. So, I decided to do a copy and paste. When I clicked on "Select All" to highlight in the copy phase, the file disappeared, probably because I hit the space bar or something, which deletes highlighted text. I had an incomplete draft from the day before, but when I was trying to make it ready to send, it ended up all askew, paragraphs run together, number columns all jumbled, all my italics and bolds missing, etc. So in about an hour I got it into an improved form and sent that with maybe 2 minutes to spare. I found a file search product online and after about 8 hours I finally found the file in the bowels of my computer, but I cannot download it, just read it. So I am attaching it because without my quotes marked and paragraph separations, the form I sent you is difficult to follow. I typed in the text below (different font) that I added to the file that I am attaching This added stuff does not contain any major issues that might cause a problem if you accepted this late.

I have no idea how to send it to the **submit a comment** person, so would you please forward this for me? They can either accept it or not. It makes the previous version more readable.

As a hydrogeologist you might find my comments interesting. What I need to do is pump out a couple of acre feet and check the recovered SWL as an indicator of how much water is the aquifer. I have not done this before because I am in a struggle with morning glories and, as a certified organic farmer, I do not use herbicides, I use frequent tillage. Thus I have not irrigated because that will favor the morning glories. I hate to waste the water, but if I pipe it away down the field, it may soak in sufficiently far away so as not to affect the test results but not be wasted. Is such a pumping permissable?

G18342

When I made my application in 2011, I requested an irrigation season ending November 15 to be able to germinate fall-sown crops so as to avoid frost heaving of seedlings in the event that fall rains arrived late, germination was late, and seedlings were then more vulnerable to heaving. This request was denied. As a matter of fairness, using groundwater past the end of the traditional irrigation season to continue production of mature commercial marijuana under the claim of "nursery use" when such use does not qualify as propagation/nursery use—well that is hard to accept.

Unless there are other controlling Statutes and OARs that I am unaware of, please review your policy regarding "nursery use" with the Attorney General's office.

Other

"Aquifer" confusion in the GARs: Since the application does not specify a proposed well depth, Condition B2 (c) is recommended to limit well construction to a single aquifer in the fractured bedrock aquifer. Does this mean that drilling must stop upon the breaching of a confined aquifer as evidenced by water rising in the borehole? How will that be enforced?

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Conclusion

You say: …the groundwater resource cannot be determined to be over-appropriated. Using the same data that you presented and more, we say: the groundwater resource cannot be determined to be under-appropriated without more data. Please consider our comments and please take another look at the He He application.

Thank you for the opportunity to comment.

Richard and Kathryn Harrington

G-18342

GRAHAM Elisabeth A * WRD

From: Louis Liu <louisliu4463@gmail.com>
Sent: Friday, February 03, 2017 8:59 AM
To: GRAHAM Elisabeth A * WRD

Hello Lisa

I am writing to inform you that I am no longer working on behalf of He He Properties. Please contact Mark or Simon regarding the case. They are taking over my responsibilities

GRAHAM Elisabeth A * WRD

From: Mark Wiest <mark_wiest@yahoo.com>
Sent: Wednesday, February 01, 2017 10:48 AM
To: GRAHAM Elisabeth A * WRD
Subject: Re: G-18342

Lisa,
Thank you. Working with these guys, China based, is like swimming in wet cement trying to get them to understand the process and give the correct response in any kind of timely manner.
Will be back to you.
Thanks,
Mark Wiest
541-261-1088

On Tuesday, January 31, 2017 4:27 PM, GRAHAM Elisabeth A * WRD <Elisabeth.A.Graham@oregon.gov> wrote:

Hello Mark,

Thank for your phone calls, I am currently waiting on the verification from He He Properties that you are now representing them on this application.

If you have their contact information, preferably email, I can contact them directly.

Please let me know if you have any further questions.

Sincerely,
Lisa Graham

From: GRAHAM Elisabeth A * WRD
Sent: Monday, December 05, 2016 9:54 AM
To: 'mark_wiest@yahoo.com'
Subject: G-18342

Good morning Mark,

To move forward on updating the agent information on this application I will need confirmation from either Richard Harrington (who appears to own the land, via the Well ID Application 4/5/2013) or a representative from He He Properties of America that you are now the agent representing this application.

Please let me know if you have any further questions.

Thank you,

Lisa Graham | Water Right Application Caseworker
Water Resources Department | 725 Summer St. NE, Suite A | Salem, Oregon 97301
Ph: 503 986-0808 | Fax: 503 986-0901
Email: Elisabeth.A.Graham@oregon.gov | Web: http://www.wrd.state.or.us

Oregon
Kate Brown, Governor

Water Resources Department
725 Summer St NE, Suite A
Salem, OR 97301
(503) 986-0900
Fax (503) 986-0904

October 7, 2016

HE HE PROPERTIES OF AMERICA
LOUIS LIU
544 N HEIGHTS DR
EAGLE POINT, OR 97524

Reference: File G-18342

Dear Applicant:

THIS IS NOT A PERMIT AND IS SUBJECT TO CHANGE AT THE NEXT PHASE OF PROCESSING.

This letter is to inform you of the preliminary analysis of the water-use permit application and to describe the options. In determining whether an application may be approved, the Department must consider the factors listed below, all of which must be favorable to the proposed use if it is to be allowed. Based on the information supplied, the Water Resources Department has made the following preliminary determinations:

Initial Review Determinations:

1. The application proposed the appropriation of 0.167 cubic foot per second (CFS) of water from Well 1 in Hog Creek Basin for year-round nursery use on 30.0 acres.

2. The proposed use is not prohibited by law or rule except where otherwise noted below.

3. The appropriation of water from Well 1 in Hog Creek Basin for nursery use is allowable under the Rogue Basin Program (OAR 690-515).

4. Groundwater will likely be available within the capacity of the resource, and if properly conditioned, the proposed use of groundwater will avoid injury to existing groundwater rights.

5. The Department has determined, based upon OAR 690-009, that the proposed groundwater use will not have the potential for substantial interference with any surface water source.

6. The proposed use is located above the Rogue Scenic Waterway, as designated under Oregon Revised Statute 390.826.

Summary of Initial Determinations

The appropriation of 0.167 CFS of water from Well 1 in Hog Creek Basin for year-round nursery use on 30.0 acres is allowable.

Because of these favorable determinations, the Department can now move the application to the next phase of the water-rights application review process, where public interest factors will be evaluated.

IR → AG use
= NU
update on PFO

Please reference the application number when sending any correspondence regarding the conclusions of this initial review. Comments received within the comment period will be evaluated at the next phase of the process.

To Proceed With the Application:

If you choose to proceed with the application, you do not have to notify the Department. The application will automatically be placed on the Department's Public Notice to allow others the opportunity to comment. After the comment period the Department will complete a public interest review and issue a Proposed Final Order.

Withdrawal Refunds:

If you choose not to proceed, you may withdraw the application and receive a refund (minus a $225 processing charge per application). To accomplish this you must notify the Department in writing by **Friday, October 21, 2016**. For your convenience you may use the enclosed "STOP PROCESSING" form.

If A Permit Is Issued It Will Likely Include The Following Conditions:

1. Measurement devices, and recording/reporting of annual water use conditions:

   A. Before water use may begin under this permit, the permittee shall install a totalizing flow meter at each point of appropriation. The permittee shall maintain the device in good working order.

   B. The permittee shall allow the watermaster access to the device; provided however, where any device is located within a private structure, the watermaster shall request access upon reasonable notice.

   C. The permittee shall keep a complete record of the volume of water diverted each month, and shall submit a report which includes water-use measurements to the Department annually, or more frequently as may be required by the Director. Further, the Director may require the permittee to report general water-use information, including the place and nature of use of water under the permit.

   D. The Director may provide an opportunity for the permittee to submit alternative measuring and reporting procedures for review and approval.

2. Static Water Level Conditions

   To monitor the effect of water use from the well(s) authorized under this permit, the Department requires the water user to obtain, from a qualified individual (see below), and report annual static water-level measurements. The static water level shall be measured in the month of March. Reports shall be submitted to the Department within 30 days of measurement.

   Measurements must be made according to the following schedule:

   Before Use of Water Takes Place
   Initial and Annual Static Water Level Measurements
   The Department requires the permittee to report an initial water-level measurement in the month specified above once well construction is complete, and annually thereafter until use of water begins; and

After Use of Water has Begun

Seven Consecutive Annual Static Water Level Measurements

Following the first year of water use, the user shall report seven consecutive annual static water-level measurements. The first of these seven annual measurements will establish the reference level against which future annual measurements will be compared. Based on an analysis of the data collected, the Director may require the user to obtain and report additional annual static water-level measurements beyond the seven year minimum reporting period. The additional measurements may be required in a different month. If the measurement requirement is stopped, the Director may restart it at any time.

All measurements shall be made by a certified water rights examiner, registered professional geologist, registered professional engineer, licensed well constructor or pump installer licensed by the Construction Contractors Board and be submitted to the Department on forms provided by the Department. The Department requires the individual performing the measurement to:

A. Identify each well with its associated measurement;
B. Measure and report water levels to the nearest tenth of a foot as depth-to-water below ground surface;
C. Specify the method used to obtain each well measurement; and
D. Certify the accuracy of all measurements and calculations reported to the Department.

The Department may require the discontinuance of groundwater use, or reduce the rate or volume of withdrawal, from the well(s) if any of the following events occur:

A. Annual water-level measurements reveal an average water-level decline of three or more feet per year for five consecutive years; or
B. Annual water-level measurements reveal a water-level decline of 15 or more feet in fewer than five consecutive years; or
C. Annual water-level measurements reveal a water-level decline of 25 or more feet; or
D. Hydraulic interference leads to a decline of 25 or more feet in any neighboring well with senior priority.

The period of non-use or restricted use shall continue until the water level rises above the decline level which triggered the action or until the Department determines, based on the permittee's and/or the Department's data and analysis, that no action is necessary because the aquifer in question can sustain the observed declines without adversely impacting the resource or senior water rights. The water user shall in no instance allow excessive decline, as defined in Commission rules, to occur within the aquifer as a result of use under this permit. If more than one well is involved, the water user may submit an alternative measurement and reporting plan for review and approval by the Department.

3. Scenic Waterway Condition

Use of water under authority of this permit may be regulated if analysis of data available after the permit is issued discloses that the appropriation will measurably reduce the surface water flows necessary to maintain the free-flowing character of a scenic waterway in quantities necessary for recreation, fish and wildlife in effect as of the priority date of the right or as those quantities may be subsequently reduced.

4. Ground water production shall be only from a single aquifer in the bedrock groundwater reservoir.

5. Well Identification Tag Condition

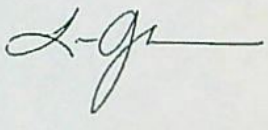
Prior to using water from any well listed on this permit, the permittee shall ensure that the well has been assigned an OWRD Well Identification Number (Well ID tag), which shall be permanently attached to the well. The Well ID shall be used as a reference in any correspondence regarding the well, including any reports of water use, water level, or pump test data.

The water source identified in the application may be affected by an Agricultural Water Quality Management Area Plan. These plans are developed by the Oregon Department of Agriculture (ODA) with the cooperation of local landowners and other interested stakeholders, and help to ensure that current and new appropriations of water are done in a way that does not adversely harm the environment.
You are encouraged to explore ODA's Water Quality Program web site at http://www.oregon.gov/ODA/programs/NaturalResources/Pages/AgWaterQuality.aspx to learn more about the plans and how they may affect the proposed water use.

If you have any questions:

Feel free to call me at 503-986-0808 if you have any questions regarding the contents of this letter or the application. Please have the application number available if you call. General questions about water rights and water use permits should be directed to our customer service staff at 503-986-0801. When corresponding by mail, please use this address: Lisa Graham, Oregon Water Resources Department, 725 Summer St NE Ste A, Salem OR 97301-1266. Our fax number is 503-986-0901.

Sincerely,



Lisa Graham
Water Right Application Caseworker

enclosures: Application Process Description and Stop Processing Request Form

G-18342
WAB 15-NO PSI
POU 15-NO PSI
GW

APPLICATION FACT SHEET

Application File Number: G-18342

Applicant: HE HE PROPERTIES OF AMERICA

County: JACKSON

Watermaster: 13

Priority Date: JULY 15, 2016

Source: HOG CREEK BASIN

Use: NURSERY USE ON 30.0 ACRES

Quantity: 0.167 CUBIC FOOT PER SECOND

Basin Name & Number: Rogue, #15

Stream Index Reference: Volume 1A ROGUE R MISC

Well Location: SWNW SECTION 27, T35S, R1W, W.M.; 1527 FEET SOUTH AND 392 FEET EAST FROM NW CORNER, SECTION 27

Place of Use:

SW ¼ NW ¼ 15.0 ACRES
SECTION 27

SE ¼ NE ¼ 15.0 ACRES
SECTION 28
TOWNSHIP 35 SOUTH, RANGE 1 WEST, W.M.

14 DAY STOP PROCESSING DEADLINE DATE: Friday, October 21, 2016

PUBLIC NOTICE DATE: Tuesday, October 11, 2016

30 DAY COMMENT DEADLINE DATE: Thursday, November 10, 2016

APPLICATION PROCESS DESCRIPTION FOR GROUNDWATER, SURFACE WATER AND REGULAR RESERVOIR APPLICATIONS

In order to take and use the waters of Oregon, a citizen must first obtain a permit from the Water Resources Department. The water must be used for beneficial purpose - without waste. To become well-informed about water right topics, weekly public notice, forms and fees please visit our web site at **www.wrd.state.or.us**

1. ***Pre-application considerations***
   - follow instructions in the application packet
   - if you have questions about completing an application or would like to arrange a pre-application conference contact the Department's Water Rights Customer Service Group at 503-986-0801

2. ***Application filing***
   - application with fee is received by the Department
   - Department determines completeness of application
   - if use is not allowed by statute (ORS 538), the application and fees are returned to the applicant
   - incomplete application and fees are returned to the applicant
   - only a complete application receives a tentative priority date, is assigned a caseworker, and moves forward for processing

3. ***Initial Review (IR)***
   - caseworker reviews application by considering basin plans, water availability, statutory restrictions and all other appropriate factors
   - caseworker sends IR report to applicant
   - contact the caseworker if you have questions about the IR
   - four days after date of the IR, it is included in Department's weekly Public Notice
   - public comments must be submitted within 30 days after the Public Notice
   - **administrative hold** may be requested in writing by applicant

4. ***Proposed Final Order (PFO)***
   - caseworker evaluates application against required criteria and develops draft permit, if appropriate
   - PFO includes instructions for filing of protests
   - caseworker considers public comments and mails PFO to applicant
   - the PFO is included in Department's weekly Public Notice
   - public protests to the PFO must be submitted within 45 days after the Public Notice

Stop Processing deadline is within 14 days of Initial Review - use the form below
- applicant may request no further action and fee refund of all but $225

STOP PROCESSING REQUEST FOR
GROUNDWATER, SURFACE WATER AND REGULAR RESERVOIR APPLICATIONS

Applicant notification to withdraw Water Right Application # _____

After reviewing the Initial Review for my application, I request that processing be stopped and the fees be refunded (minus a $225 examination fee.) I understand that without a valid permit I may not legally use the water as requested in my application

Signature _____ date _____

Signature _____ date _____

Under ORS 537.150 (5) and 537.620 (5) timely submission of this request authorizes that the water right application process be stopped and all filing fees (except $225 examination fee) be returned.

This notice must be received at Water Resources Department by _____

Return the notice to: OWRD, Water Rights Division
STOP PROCESSING
725 Summer Street, NE - Suite A
Salem OR 97301-1271

5. *Final Order (FO)*
   - if no protest is filed, Final Order is issued

The protest process

If one or more protests are filed, permit process consists of:
- settlement discussion
- contested case hearing
- proposed order
- period of time to file exceptions
- possible hearing by Water Resources Commission
- final order issued

Permit holder responsibilities

- comply with all water use conditions of the permit
- advise Department of address change or assignment to new permit holder
- if need arises, request extension of time or authorize cancellation of permit
- submit timely claim of beneficial use (COBU) to Department
- most permits require COBU to be prepared by a Certified Water Right Examiner
- permits may be canceled by the permit holder or by the Department for failure to comply with or one or more permit conditions

Mailing List for IR Copies

Application #G-18342 IR Date: October 7, 2016

Original and map mailed to applicant:

HE HE PROPERTIES OF AMERICA, 544 N HEIGHTS DR, EAGLE POINT, OR 97524

Copies Mailed
By: SP
(SUPPORT STAFF)
on: 10-7-16
(DATE)

SENT VIA EMAIL:
1. WRD -Watermaster # 13

IR, Map, and Fact Sheet Copies sent to:
2. WRD - File # G-18342
3. WRD - Regional Manager: SW
4. Department of Agriculture

Copy to:
1. Eagle Point Irrigation District, PO Box 157, Eagle Point OR 97524

Caseworker: Lisa Graham

STATE OF OREGON
WATER RESOURCES DEPARTMENT

RECEIPT # 121306

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

INVOICE # _____

RECEIVED FROM: He He Properties of America LLC
BY:

APPLICATION	G-18342
PERMIT	
TRANSFER	

CASH: ☐ CHECK:# ☒ 1139 OTHER: (IDENTIFY) ☐ _____

TOTAL REC'D $650.00

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

46111

			EXAM FEE		RECORD FEE
	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		$	0202	$
0203	GROUND WATER		$650.00	0204	$
0205	TRANSFER		$		
	WELL CONSTRUCTION		**EXAM FEE**		**LICENSE FEE**
0218	WELL DRILL CONSTRUCTOR		$	0219	$
	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: 121306 DATED: 9/15/16 BY: Felicia Brown

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

STATE OF OREGON
WATER RESOURCES DEPARTMENT

RECEIPT # 121306

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

INVOICE # _____

RECEIVED FROM: He He Properties of America LLC
BY:

APPLICATION G-18342
PERMIT
TRANSFER

CASH: ☐ CHECK:# ☒ 1139 OTHER: (IDENTIFY) ☐ _____

TOTAL REC'D $650.00

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

46111

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 SURFACE WATER $ 0202 $
0203 GROUND WATER $650.00 0204 $
0205 TRANSFER $

WELL CONSTRUCTION EXAM FEE LICENSE FEE
0218 WELL DRILL CONSTRUCTOR $ 0219 $
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: 121306 DATED: 9/15/16 BY: Felicia Brown

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

STATE OF OREGON

WATER RESOURCES DEPARTMENT

RECEIPT # 120537

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

INVOICE # _____

RECEIVED FROM: Hefle Properties of America LLC

BY: _____

APPLICATION	G-18342
PERMIT	
TRANSFER	

CASH: ☐ CHECK:# ☒ 1076 OTHER: (IDENTIFY) ☐ _____

TOTAL REC'D $1,900.00

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

46111

	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	SURFACE WATER	$	0202	$	
0203	GROUND WATER	$ 450.00	0204	$ 450.00	
0205	TRANSFER	$			
	WELL CONSTRUCTION	EXAM FEE		LICENSE FEE	
0218	WELL DRILL CONSTRUCTOR	$	0219	$	
	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: 120537 DATED: 7/15/16 BY: Courtney Wetherick

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

Application for a Permit to Use

Ground Water

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

Agent:
Mark Wiest
541-261-1088
Please update:

SECTION 1: APPLICANT INFORMATION AND SIGNATURE

Applicant Information

NAME	Louis Liu			
PHONE (WK)	510-386-4377	CELL		
ADDRESS	544 N Heights Dr			
CITY	Eagle Point	STATE OR	ZIP 97524	E-MAIL* louisliu4463@Gmail.com

Organization Information

NAME	He He Properties of America		PHONE	FAX
ADDRESS	544 N Heights Dr			CELL
CITY	Eagle Point	STATE OR	ZIP 97524	E-MAIL*

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

AGENT / BUSINESS NAME			PHONE	FAX
ADDRESS				CELL
CITY		STATE	ZIP	E-MAIL*

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Note: Attach multiple copies as needed

* By providing an e-mail address, consent is given to receive all correspondence from the department electronically. (paper copies of the final order documents will also be mailed.)

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By my signature below I confirm that I understand:

- I am asking to use water specifically as described in this application.
- Evaluation of this application will be based on information provided in the application.
- I cannot use water legally until the Water Resources Department issues a permit.
- Oregon law requires that a permit be issued before beginning construction of any proposed well, unless the use is exempt. Acceptance of this application does not guarantee a permit will be issued.
- If I get a permit, I must not waste water.
- If development of the water use is not according to the terms of the permit, the permit can be cancelled.
- The water use must be compatible with local comprehensive land-use plans.
- Even if the Department issues a permit, I may have to stop using water to allow senior water-right holders to get water to which they are entitled.

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

Applicant Signature	Print Name *and title if applicable*	Date
	Louis Liu	6/16/16
Applicant Signature	Print Name *and title if applicable*	Date

For Department Use

App. No. G-18342 Permit No. _____ Date _____

SECTION 2: PROPERTY OWNERSHIP

Please indicate if you own all the lands associated with the project from which the water is to be diverted, conveyed, and used.

Soon ~~☒ Yes~~

- ☐ There are no encumbrances.
- ☐ This land is encumbered by easements, rights of way, roads or other encumbrances.

☒ No

- ☒ I have a recorded easement or written authorization permitting access. Please see attached
- ☐ I do not currently have written authorization or easement permitting access.
- ☐ Written authorization or an easement is not necessary, because the only affected lands I do not own are state-owned submersible lands, and this application is for irrigation and/or domestic use only (ORS 274.040).
- ☐ Water is to be diverted, conveyed, and/or used only on federal lands.

List the names and mailing addresses of all affected landowners *(attach additional sheets if necessary)*.

———

You must provide the legal description of : 1. The property from which the water is to be diverted, 2. Any property crossed by the proposed ditch, canal or other work, and 3. Any property on which the water is to be used as depicted on the map.

SECTION 3: WELL DEVELOPMENT

		IF LESS THAN 1 MILE:	
WELL NO.	NAME OF NEAREST SURFACE WATER	DISTANCE TO NEAREST SURFACE WATER	ELEVATION CHANGE BETWEEN NEAREST SURFACE WATER AND WELL HEAD
1	Hog Creek	4,023 ft	-35 feet

Please provide any information for your existing or proposed well(s) that you believe may be helpful in evaluating your application. For existing wells, describe any previous alteration(s) or repair(s) not documented in the attached well log or other materials *(attach additional sheets if necessary)*.

———

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SECTION 3: WELL DEVELOPMENT, CONTINUED

Total maximum rate requested: 75 gpm (each well will be evaluated at the maximum rate unless you indicate well-specific rates and annual volumes in the table below).

The table below must be completed for each source to be evaluated or the application will be returned. If this is an existing well, the information may be found on the applicable well log. *(If a well log is available, please submit it in addition to completing the table.)* If this is a proposed well, or well-modification, consider consulting with a licensed well driller, geologist, or certified water right examiner to obtain the necessary information.

										PROPOSED USE			
OWNER'S WELL NAME OR NO.	PROPOSED	EXISTING	WELL ID (WELL TAG) NO.* OR WELL LOG ID**	ABANDONED	CASING DIAMETER	CASING INTERVALS (IN FEET)	PERFORATED OR SCREENED INTERVALS (IN FEET)	SEAL INTERVALS (IN FEET)	MOST RECENT STATIC WATER LEVEL & DATE (IN FEET)	SOURCE AQUIFER***	TOTAL WELL DEPTH	WELL-SPECIFIC RATE (GPM)	ANNUAL VOLUME (ACRE-FEET)
Unknown	☒	☐	N/A	☐	6"	Meets	minimum construction standards		N/A	Bedrock			
	☐	☐		☐									
	☐	☐		☐									
	☐	☐		☐	*See attached			examples of *					
	☐	☐		☐		neighboring well		logs					
	☐	☐		☐									
	☐	☐		☐									
	☐	☐		☐									

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* Licensed drillers are required to attach a Department-supplied Well Tag, with a unique Well ID or Well Tag Number to all new or newly altered wells. Landowners can request a Well ID for existing wells that do not have one. The Well ID is intended to serve as a unique identification number for each well.

** A well log ID (e.g. MARI 1234) is assigned by the Department to each log in the agency's well log database. A separate well log is required for each subsequent alteration of the well.

*** Source aquifer examples: Troutdale Formation, gravel and sand, alluvium, basalt, bedrock, etc.

SECTION 4: WATER USE

USE	PERIOD OF USE	ANNUAL VOLUME (ACRE-FEET)
Nursery Use	Year-round	90 Acre feet

Exempt Uses: Please note that 15,000 gallons per day for single or group **domestic** purposes and 5,000 gallons per day for a single **industrial or commercial** purpose are exempt from permitting requirements.

For irrigation use only:
Please indicate the number of primary and supplemental acres to be irrigated (*must match map*).

Primary: 30 Acres Supplemental: _____ Acres

List the Permit or Certificate number of the underlying primary water right(s): N/A

Indicate the maximum total number of acre-feet you expect to use in an irrigation season: 90 Acre feet

- If the use is **municipal or quasi-municipal**, attach **Form M**
- If the use is **domestic**, indicate the number of households: _____

  If the use is **mining**, describe what is being mined and the method(s) of extraction: _____

SECTION 5: WATER MANAGEMENT

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A. Diversion and Conveyance
What equipment will you use to pump water from your well(s)?

☒ Pump (give horsepower and type): Maximum size pump allowed

☐ Other means (describe): _____

Provide a description of the proposed means of diversion, construction, and operation of the diversion works and conveyance of water. pumped from well into buildge-in system

B. Application Method
What equipment and method of application will be used? (e.g., drip, wheel line, high-pressure sprinkler)
_____ drip emitters to the crop through high-efficency system

C. Conservation
Please describe why the amount of water requested is needed and measures you propose to: prevent waste; measure the amount of water diverted; prevent damage to aquatic life and riparian habitat; prevent the discharge of contaminated water to a surface stream; prevent adverse impact to public uses of affected surface waters.
_____ A meter will be installed to ensure rate is not exceeded from well

SECTION 6: STORAGE OF GROUND WATER IN A RESERVOIR

If you would like to store ground water in a reservoir, complete this section (*if more than one reservoir, reproduce this section for each reservoir).*

Reservoir name: N/A Acreage inundated by reservoir: N/A

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SECTION 4: WATER USE

USE	PERIOD OF USE	ANNUAL VOLUME (ACRE-FEET)

Exempt Uses: Please note that 15,000 gallons per day for single or group **domestic** purposes and 5,000 gallons per day for a single **industrial or commercial** purpose are exempt from permitting requirements.

For irrigation use only:
Please indicate the number of primary and supplemental acres to be irrigated (*must match map*).

Primary: _____ Acres Supplemental: _____ Acres

List the Permit or Certificate number of the underlying primary water right(s): _____

Indicate the maximum total number of acre-feet you expect to use in an irrigation season: _____

- If the use is **municipal or quasi-municipal**, attach **Form M**
- If the use is **domestic**, indicate the number of households: _____

  If the use is **mining**, describe what is being mined and the method(s) of extraction: _____

SECTION 5: WATER MANAGEMENT

A. Diversion and Conveyance
What equipment will you use to pump water from your well(s)?

☐ Pump (give horsepower and type): _____

☐ Other means (describe): _____

Provide a description of the proposed means of diversion, construction, and operation of the diversion works and conveyance of water. _____

B. Application Method
What equipment and method of application will be used? (e.g., drip, wheel line, high-pressure sprinkler)

_____

C. Conservation
Please describe why the amount of water requested is needed and measures you propose to: prevent waste; measure the amount of water diverted; prevent damage to aquatic life and riparian habitat; prevent the discharge of contaminated water to a surface stream; prevent adverse impact to public uses of affected surface waters.

_____

SECTION 6: STORAGE OF GROUND WATER IN A RESERVOIR

If you would like to store ground water in a reservoir, complete this section (*if more than one reservoir, reproduce this section for each reservoir).*

Reservoir name: Buttercup Pond Acreage inundated by reservoir: 3.44

Use(s): Bulge / Fish pond

Volume of Reservoir (acre-feet): 35 Dam height (feet, if excavated, write "zero"): 5

*Note: If the dam height is greater than or equal to 10.0' above land surface **AND** the reservoir will store 9.2 acre feet or more, engineered plans and specifications must be approved prior to storage of water.*

SECTION 7: USE OF STORED GROUND WATER FROM THE RESERVOIR

If you would like to use stored ground water from the reservoir, complete this section *(if more than one reservoir, reproduce this section for each reservoir).*

Annual volume (acre-feet): N/A

USE OF STORED GROUND WATER	PERIOD OF USE
Reservoir to be used as bulge	during period of nursery use

SECTION 8: PROJECT SCHEDULE

Date construction will begin: _____

Date construction will be completed: _____

Date beneficial water use will begin: _____

SECTION 9: WITHIN A DISTRICT

☐ Check here if the point of diversion or place of use are located within or served by an irrigation or other water district.

Irrigation District Name	Address	
City	State	Zip

SECTION 10: REMARKS

Use this space to clarify any information you have provided in the application *(attach additional sheets if necessary).*

_____

Use(s): N/A

Volume of Reservoir (acre-feet): N/A Dam height (feet, if excavated, write "zero"): N/A

*Note: If the dam height is greater than or equal to 10.0' above land surface **AND** the reservoir will store 9.2 acre feet or more, engineered plans and specifications must be approved prior to storage of water.*

SECTION 7: USE OF STORED GROUND WATER FROM THE RESERVOIR

If you would like to use stored ground water from the reservoir, complete this section *(if more than one reservoir, reproduce this section for each reservoir).*

Annual volume (acre-feet): _____

USE OF STORED GROUND WATER	PERIOD OF USE

SECTION 8: PROJECT SCHEDULE

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Date construction will begin: As soon as possible

Date construction will be completed: As soon as possible

Date beneficial water use will begin: As soon as possible

SECTION 9: WITHIN A DISTRICT

☐ Check here if the point of diversion or place of use are located within or served by an irrigation or other water district.

Irrigation District Name	Address	
City	State	Zip

SECTION 10: REMARKS

Use this space to clarify any information you have provided in the application *(attach additional sheets if necessary).*

___ Attached well logs
- Jack 54979, Jack 34376, Jack 2926
(examples of neighboring wells)

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JACKSON COUNTY
Oregon

LETTER OF AUTHORIZATION

DEVELOPMENT SERVICES
10 South Oakdale, Room 100
Medford, Oregon 97501
Phone: 541-774-6900
Fax: 541-774-6948

LET IT BE KNOWN THAT Louis Liu of He He Properties of America LLC has been retained to act as Agent to perform all acts for development on my property identified below. These acts include: Pre-application Conference, Filing applications and/or other required documents relative to all Zoning Applications, Sewage Disposal Permits and Inspections, Assigning an Address, Road Approach Permits, Manufactured Dwelling Permits, Building Permits, and Mechanical Permits (authorization not useable for Plumbing or Electrical Permits per State regulations).

13202 Hwy 62 Eagle Point, OR 97524
(Address or Road)

AND DESCRIBED IN THE RECORDS OF JACKSON COUNTY AS:

TOWNSHIP 35, RANGE 1W, SECTION 27, TAX LOT(S) 301

TOWNSHIP _____, RANGE _____, SECTION _____, TAX LOT(S) _____

THE COSTS OF THE ABOVE ACTIONS, WHICH ARE NOT SATISFIED BY THE AGENT, ARE THE RESPONSIBILITY OF THE UNDERSIGNED PROPERTY OWNER.

PROPERTY OWNER:
This authorization is valid for ☐ 1 year; ☐ 2 years; ☒ Other 6 months (Must select one)

SIGNATURE: Michael E Bunnell DATE: 6/9/16
PRINTED NAME: Michael E. Bunnell
ADDRESS: 3560 Excel Drive, Suite 101 PHONE: 541-776-1311
CITY/STATE/ZIP: Medford, OR 97504 FAX: _____

CHECK ONE: ☐ APPLICANT ☑ AGENT
SIGNATURE: _____ DATE: 6/7/16
PRINTED NAME: Louis Liu
ADDRESS: 315 S. E St. PHONE: (510) 386-4377
CITY/STATE/ZIP: Lakeview OR 97630 FAX: _____

Additional, if necessary – ***CHECK ONE:*** ☐ APPLICANT ☐ AGENT
SIGNATURE: _____ DATE: _____
PRINTED NAME: _____
ADDRESS: _____ PHONE: _____
CITY/STATE/ZIP: _____ FAX: _____

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SALEM, OR

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3:37

20.-
10.-
11.

WARRANTY DEED

EUGENE F. BURRILL and GLADYS O. BURRILL, Grantors, convey and warrant to BURRILL PROSPECT PROPERTIES, LLC, an Oregon limited liability company, Grantee, the real property located in Jackson County, Oregon, and more particularly described on Exhibit "A" attached hereto and made a part hereof.

The liability and obligations of the Grantors to Grantee and Grantee's heirs and assigns under the warranties and covenants contained herein or provided by law shall be limited to the amount, nature and terms of any right or indemnification available to Grantors under any title insurance policy, and Grantors shall have no liability or obligation except to the extent that reimbursement for such liability or obligation is available to Grantors under any such title insurance policy.

The true consideration for this conveyance is other value given.

THIS INSTRUMENT WILL NOT ALLOW USE OF THE PROPERTY DESCRIBED IN THIS INSTRUMENT IN VIOLATION OF APPLICABLE LAND USE LAWS AND REGULATIONS. BEFORE SIGNING OR ACCEPTING THIS INSTRUMENT, THE PERSON ACQUIRING FEE TITLE TO THE PROPERTY SHOULD CHECK WITH THE APPROPRIATE CITY OR COUNTY PLANNING DEPARTMENT TO VERIFY APPROVED USES AND TO DETERMINE ANY LIMITS ON LAWSUITS AGAINST FARMING OR FOREST PRACTICES AS DEFINED IN ORS 30.930.

DATED this first day of January, 2001.

EUGENE F. BURRILL

GLADYS O. BURRILL

STATE OF OREGON)
) ss.
County of Jackson)

On this 15th day of December, 2000, personally appeared the above-named EUGENE F. BURRILL and GLADYS O. BURRILL and acknowledged the foregoing instrument to be their voluntary act and deed.

Before me:

Notary Public for Oregon

OFFICIAL SEAL
DEBRA A. NOTE
NOTARY PUBLIC-OREGON
COMMISSION NO. 323854
MY COMMISSION EXPIRES AUG. 27, 2003

UNLESS A CHANGE IS REQUESTED,
ALL TAX STATEMENTS SHALL BE
SENT TO THE FOLLOWING ADDRESS:
Burrill Prospect Properties, LLC
300 Crater Lake Avenue, Suite 2A
Medford, OR 97504

AFTER RECORDING, RETURN TO:
Stuart E. Foster
Foster, Purdy, Allan,
Peterson & Dahlin, LLP
Post Office Box 1667
Medford, OR 97501

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EXHIBIT "A"

PARCEL 1 (Prospect RV Park):

Beginning at a 1" iron pipe located at the Southwest corner of Lot 1, Block A of PROSPECT TRACTS, Jackson County, Oregon; thence North 6° 23' West, 720.43 feet to a 1" iron pipe found for the Northwest corner of said Lot; thence North 68° 52' 40" East, 749.39 feet to a 1" iron pipe found for the Northeast corner of said lot; thence North 81° 21' East, along the Northerly boundary of Lot 2 of said Block A, a distance of 351.75 feet to intersect the Northwesterly boundary of the relocated Crater Lake Highway; thence south 40°47' 30" West, along said highway boundary, 1352.32 feet to a point (from which Engineer's centerline station 1113+00 bears South 49°12' 30" East, 75.00 feet); thence South 49° 19' 20" West, along said highway boundary, 22.75 feet to the South boundary of said Lot 1; thence South 89°46' 50" West, 65.96 feet to the point of beginning.

(Code 59-2, Account #1-58413-7, Map #323E29C, Tax Lot #1400)
(Code 59-2, Account #1-50921-0, Map #323E29C, Tax Lot #1300)

SUBJECT TO:

1) Easements of record; and

2) Line of Credit Instrument dated July 16, 1999, among Eugene F. Burrill and Gladys O. Burrill, as Grantors; Bank of Southern Oregon, as Beneficiary and Oregon Title Insurance Company, as Trustee, recorded on July 23, 1999, as Jackson County Recorder's Document Number 99-38936.

PARCEL 2 (Red Blanket Road):

The North Half of the South Half of the Southwest Quarter of Section 28, Township 32 South, Range 3 East of the Willamette Meridian in Jackson County, Oregon.

ALSO, all of that part of the South Half of the South Half of the Southwest Quarter, of said Section 28, except that part of the same heretofore conveyed to the California Oregon Power Company by deed recorded in Volume 190, Page 578, of the Deed Records of Jackson County, Oregon.

ALSO, beginning at the Northwest corner of the Southwest Quarter of the Southeast Quarter of said Section 28, thence South along the center line of said Section 28, which is also the West line of the Southwest Quarter of the Southeast Quarter of said Section 28, to a point

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Exhibit "A" - continued

714 feet South of the point of beginning; thence East 71 feet to said point where said line intersects with the center of Barr Creek, thence Northeasterly up the center of said Barr Creek to its intersection with the North line of the Southwest Quarter of the Southeast Quarter, thence West 950 feet, more or less, to the point of beginning.

All of said land being in said Section 28, Township 32 South, Range 3 East of the Willamette Meridian, Jackson County, Oregon.

Subject to easements of record.

(Code 59-01, Account #1-0050908-1, Map #32S3E28, Tax Lot 600)
(Code 59-02, Account #1-0058412-9, Map #32S3E28, Tax Lot 600)

PARCEL 3 (Eagle Point Land):

All that portion of the Southwest Quarter of the Northwest Quarter of Section 27 lying Westerly of the West right-of-way line of the Crater Lake Highway; and the South Half of the Northeast Quarter and the Northwest Quarter of the Southeast Quarter of Section 28; all being in Township 35 South, Range 1 West of the Willamette Meridian in Jackson County, Oregon.

EXCEPTING THEREFROM that portion of said land lying between lines at right angles to the center line of the relocated Crater Lake Highway at Engineer's Stations 52+415 and 52+630 and included in a strip of land variable in width, lying on the Westerly side of said center line which center line is described as follows:

Beginning at Engineer's center line Station 51+937.920, said station being 26.764 meters North and 395.581 meters West of the North quarter corner of Section 27, Township 35 South, Range 1 West, W.M.; thence South 1°47'46" West 982.241 meters to Engineer's center line Station 52+920.161.

The widths in meters of the strip of land above referred to are as follows:

Station	to	Station	Width on Westerly Side of Center Line
52+415		52+520	15.932 in a straight line to 24
52+520		52+565	24 in a straight line to 28
52+565		52+620	28 in a straight line to 23
52+620		52+630	23 in a straight line to 18.875

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Exhibit "A" - continued

Bearings are based upon the Oregon Coordinate System of 1983 (1991 adjustment), south zone.

Subject to easements of record.

(Code 9-02, Account #1-0023363-5, Map #35S1W27, Tax Lot 301)
(Code 9-02, Account #1-0023389-3, Map #35S1W28, Tax Lot 300)
(Code 9-19, Account #1-0074355-1, Map #35S1W28, Tax Lot 300).

Jackson County, Oregon
Recorded
OFFICIAL RECORDS

JAN 0 2 2001
3:37 PM

COUNTY CLERK

G-18342

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

RECEIVED
MAY 7 1979
WATER RESOURCES DEPT.
SALEM, OREGON

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

Jack 2926

State Well No. 35S/1W-28ad

State Permit No.

(1) OWNER:
Name MILLERS EGG RANCH
Address P.O. BOX 1217
MEDFORD, ORE

(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 ☒
6" Diam. from 0 ft. to 20 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 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?
Bailed: gal./min. with ft. drawdown after hrs.
" " " "
" " " "
AIR test 225 gal./min. with 105 ft. drawdown after 2 hrs.
Artesian flow g.p.m.
Temperature of water Depth artesian flow encountered ft.

(9) CONSTRUCTION:
Well seal—Material used PORTLAND CEMENT
Well sealed from land surface to 19 ft.
Diameter of well bore to bottom of seal 10 in.
Diameter of well bore below seal 6 in.
Number of sacks of cement used in well seal 7 sacks
How was cement grout placed? PRESSURE GROUT TREMIE PIPE
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 JACKSON Driller's well number
S.E. ¼ N.E. ¼ Section 28 T. 35S R. 1W W.M.
Bearing and distance from section or subdivision corner
PERMIT # 209-79-W

(11) WATER LEVEL: Completed well.
Depth at which water was first found 30 ft.
Static level 19 ft. below land surface. Date 5-1-79
Artesian pressure lbs. per square inch. Date

(12) WELL LOG: Diameter of well below casing 6"
Depth drilled 124 ft. Depth of completed well 124 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
SOIL, BLACK	0	2	
CLAY, BROWN	2	6	
SANDSTONE, BROWN	6	16	
SANDSTONE, BLUE	16	58	
BASALT, BLUE	58	67	
SANDSTONE, BLUE	67	124	19

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Work started 4-30- 1979 Completed 5-1- 1979
Date well drilling machine moved off of well 5-1- 1979

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] Joaquin Medina Date 5-1-, 1979
(Drilling Machine Operator)
Drilling Machine Operator's License No. 1215

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 MARTINSON WELL DRILLING, INC.
(Person, firm or corporation) (Type or print)
Address 81 BALL RD. EAGLE POINT, ORE
[Signed] Ronald J Martinson
(Water Well Contractor)
Contractor's License No. 667 Date 5-1, 1979

(USE ADDITIONAL SHEETS IF NECESSARY)

SP*45656-119

61-18742

JACK 34376

355/1W/28

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

MEDINA WELL DRILLING INC.

(START CARD) # 62057

14

(1) OWNER: Well Number
Name GERALD FLESHMAN
Address 13311 HWY 62
City EAGLE POINT State OR. Zip 97524

(2) TYPE OF WORK: LINER
☐ 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 134 ft.
Explosives used ☐ Yes ☒ No Type Amount

HOLE Diameter	From	To	SEAL Material	From	To	Amount sacks or pounds
	NO/CHANGE					

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:		NO/CHANGE			☐	☐	☐	☐
					☐	☐	☐	☐
					☐	☐	☐	☐
					☐	☐	☐	☐
Liner:	4"	0	134	160	☐	☒	☐	☐
					☐	☐	☐	☐

Final location of shoe(s)

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

From	To	Slot size	Number	Diameter	Tele/pipe size	Casing	Liner
20	134	1/8	110			☐	☒
						☐	☐
						☐	☐
						☐	☐

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

Yield gal/min	Drawdown	Drill stem at	Time
60 GPM		134	1 hr.

Temperature of Water 57 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 JACKSON Latitude Longitude
Township 35S N or S. Range 1W E or W. WM.
Section 28 ¼ ¼
Tax Lot Lot Block Subdivision
Street Address of Well (or nearest address) SAME AS//1

(10) STATIC WATER LEVEL:
13 ft. below land surface. Date 6-29-95
Artesian pressure lb. per square inch. Date

(11) WATER BEARING ZONES:
Depth at which water was first found 13 SWL

From	To	Estimated Flow Rate	SWL
		60 GPM	13

(12) WELL LOG:
Ground elevation

Material	From	To	SWL
CLEAN-OUT AND INSTALLED LINER		134	13

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SALEM, OR

Medina Well Drilling, Inc.
(503) 664-5339
3286 Hanley Road
Central Point OR 97502

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WATER RESOURCES DEPT.
SALEM, OREGON

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JUN 20 2016
SALEM, OR

Date started 6-29-95 Completed 6-29-95

(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 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.

WWC Number 1207
Signed Joaquin Medina Date 6-30-95

ORIGINAL & FIRST COPY - WATER RESOURCES DEPARTMENT SECOND COPY - CONSTRUCTOR THIRD COPY - CUSTOMER 9809C 10/91

G-18342

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JUL 15 2016

SALEM, OR

JACK 34376

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

Application for Well ID Number

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APR 05 2013

WATER RESOURCES DEPT
SALEM, OREGON

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

I. OWNER INFORMATION

Current Owner Name *(please print)*: Richard Harrington

Mailing Address: PO Box 192

City: Butte Falls State: OR Zip: 97522

Mailing Address *(to send Well I.D.)*:

City: State: Zip:

II. WELL INFORMATION *(Do not complete this section if the well report is attached.)*

Township: (North/South) Range: (East/West) Section:

Tax Lot: County: 1/4 1/4

Street Address of Well: City:

Owner at time the well was constructed, (if known):

If the property had a different street address in the past: see attached well reports

III. GENERAL WELL INFORMATION *(Do not complete this section if the well report is attached)*

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

Date Well Constructed: Total Well Depth: Casing Diameter:

Other Information:

SUBMITTED BY *(please print)*: Shavon Haynes-Assistant Watermaster Southwest Region

PHONE: (541) 774-6883 FAX: (541) 774-6187

Send application to Oregon Water Resources Department; 725 Summer St NE, Suite A; Salem, Oregon 97301-1266; fax (503) 986-0902. Applications are processed and Well I.D. Numbers are mailed every Wednesday.

For Official Use Only by the Oregon Water Resources Department:

Received Date: 4-5-13 Well Log Number: JACK 34376 Well Identification #: L-94583

Gr18342

JACK 54979

Jack 54979

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

GRIBBLE WELL DRILLING INC.

(START CARD) # 143816

(1) OWNER: Well Number 1-49175
Name Jim Johnson
Address PO Box 1186
City Eagle Point State Or Zip 97524

(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 400 ft.
Explosives used ☐ Yes ☒ No Type Amount

HOLE Diameter	From	To	SEAL Material	From	To	Amount sacks or pounds
12"	0	50	bent	0	50	1100 lbs
8"	50	400				

How was seal placed: Method ☐ A ☐ B ☐ C ☐ D ☐ E
☒ Other poured dry
Backfill placed from ft. to ft. Material
Gravel placed from ft. to ft. Size of gravel

(6) CASING/LINER:

	Diameter	From	To	Gauge	Steel	Plastic	Welded	Threaded
Casing:	8"	+1	59	250	☒	☐	☒	☐
					☐	☐	☐	☐
					☐	☐	☐	☐
					☐	☐	☐	☐
Liner:					☐	☐	☐	☐
					☐	☐	☐	☐

Final location of shoe(s) 59'

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

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From	To	Slot size	Number	Diameter	Tele/pipe size	Casing	Liner
JUL 15 2016						☐	☐
						☐	☐
		N/A				☐	☐
SALEM, OR						☐	☐

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

Yield gal/min	Drawdown	Drill stem at	Time
100		400	1 hr.

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 Jackson Latitude 42'30,246 Longitude 122'49,018
Township 35S N or S. Range 1W E or W. WM.
Section 27 SE ¼ NW ¼
Tax Lot 202 Lot Block Subdivision
Street Address of Well (or nearest address) 13499 Hwy 62
Eagle Point, Or. 97524

(10) STATIC WATER LEVEL:
55 ft. below land surface. Date 9-4-01
Artesian pressure lb. per square inch. Date

(11) WATER BEARING ZONES:
Depth at which water was first found 115'

From	To	Estimated Flow Rate	SWL
115	120	20	55
126	130	30	55
246	250	25	55
350	355	25	55

(12) WELL LOG:
Ground elevation

Material		From	To	SWL
soil	brown	0	3	
claystone	brown	3	30	
claystone	gray	30	145	55
claystone	red	145	150	
" "	gray	150	376	55
" "	pink	376	394	
claystone	gray	394	400	55

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SALEM, OR

RECEIVED
SEP 24 2001
WATER RESOURCES DEPT.
SALEM, OREGON

Date started 9-4-01 Completed 9-5-01

(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 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.

WWC Number 205
Signed Date 9-6-01

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G-18342

Oregon Water Resources Department
Apply for a Permit to Appropriate Ground Water and/or Store Ground Water

Main Help
Return Contact Us

Today's Date: Wednesday, May 25, 2016

Base Application Fee for use of Ground, Surface and optionally Stored Water.		$1,150.00
Number of proposed cubic feet per second (cfs) to be appropriated. (1 cfs = 448.83 gallons per minute)	.2	$300.00
Number of proposed Use's for the appropriated water. (i.e. Irrigation, Supplemental Irrigation, Pond Maintenance, Industrial, Commercial, etc) *	1	
Number of proposed Ground Water points of appropriation. (i.e. number of wells) (include all injection wells, if applicable) **	1	
Number of Acre Feet to be stored in a reservoir/pond from Ground Water.	0	
Number of Acre Feet to be appropriated from reservoir/pond (Only Applies to reservoir/pond constructed under Ground Water Application)	0	
Number of reservoirs.	0	
Permit Recording Fee. ***		$450.00
* the 1st Water Use is included in the base cost. ** the 1st Ground Water point of appropriation is included in the base cost. *** the Permit Recording Fee is not required when the application is submitted but, must be paid before a permit will be issued. It is fully refundable if a permit is not issued. If the recording fee is not paid prior to issuance of the Final Order, permit issuance will be delayed.	Recalculate	
Estimated cost of Permit Application		$1,900.00

OWRD Fee Schedule

Fee Calculator Version B20130709

RECEIVED BY OWRD
JUL 15 2016
SALEM, OR

RECEIVED BY OWRD
JUN 20 2016
SALEM, OR

G-18342

Date _____

(For staff use only)

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

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

- ☐ SECTION 1: _____
- ☐ SECTION 2: _____
- ☐ SECTION 3: _____
- ☐ SECTION 4: _____
- ☐ SECTION 5: _____
- ☐ SECTION 6: _____
- ☐ SECTION 7: _____
- ☐ SECTION 8: _____
- ☐ SECTION 9: _____
- ☐ Land Use Information Form _____
- ☐ Provide the legal description of: (1) the property from which the water is to be diverted, (2) any property crossed by the proposed ditch, canal or other work, and (3) any property on which the water is to be used as depicted on the map.
- ☐ Fees _____

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SALEM, OR

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SALEM, OR

MAP

- ☐ Permanent quality and drawn in ink
- ☐ Even map scale not less than 4" = 1 mile (example: 1" = 400 ft, 1" = 1320 ft, etc.)
- ☐ North Directional Symbol
- ☐ Township, Range, Section, Quarter/Quarter, Tax Lots
- ☐ Reference corner on map
- ☐ Location of each well, and/or dam if applicable, by reference to a recognized public land survey corner (distances north/south and east/west). Each well must be identified by a unique name and/or number.
- ☐ Indicate the area of use by Quarter/Quarter and tax lot clearly identified
- ☐ Number of acres per Quarter/Quarter and hatching to indicate area of use if for primary irrigation, supplemental irrigation, or nursery
- ☐ Location of main canals, ditches, pipelines or flumes (if well is outside of the area of use)
- ☐ Other _____

_____

_____

G-18342

Hi, Lisa

My name is Louis Liu. I work on behalf of He He Properties of America as their acting agent for the water rights application process.

With the help of Mr. Shavon Haynes, I have completed the information you requested for the fish pond permit. I have enclosed an updated map showing the location of the proposed pond, as well as a check for the addational processing fee.

My application number is: G-18342

If you have any questions on concerns, please contact me at: (cell) 510-386-4377 -or- (email) louisliu4463@gmail.com

Groundwater Application Map for Nursery Use in
35S-1W-28 -tax lot 300
15 acres SENE
35S-1W-27-tax lot 301
15 acres SWNW

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SALEM, OR

Proposed well is 1527 ft S
and 392 ft E from NW Corner Section 27

0 170 340 680 1,020 1,360 Feet

Legend

- TL 300/301
- Proposed Well Location
- POU of Nursery
- Townships
- Sections
- Quarter Sections
- Quarter Quarter Sections

1 inch = 865 feet

N

JACKSON COUNTY
WATERMASTER

Prepared by Shavon Haynes

This map is based on a digital database compiled by Jackson County from a variety of sources. Jackson County cannot accept responsibility for errors, omissions, or positional accuracy. There are no warranties, expressed or implied.

Date: 05/25/2016, JAD's Map.mxd: haynessh

G-18347
superseded

Oregon Water Resources Department
Apply for a Permit to Appropriate Ground Water and/or Store Ground Water

Today's Date: Wednesday, September 28, 2016

Base Application Fee for use of Ground, Surface and optionally Stored Water.		$1,150.00
Number of proposed cubic feet per second (cfs) to be appropriated. (1 cfs = 448.83 gallons per minute)	1	$300.00
Number of proposed Use's for the appropriated water. (i.e. Irrigation, Supplemental Irrigation, Pond Maintenance, Industrial, Commercial, etc) *	1	
Number of proposed Ground Water points of appropriation. (i.e. number of wells) (include all injection wells, if applicable) **	1	
Number of Acre Feet to be stored in a reservoir/pond from Ground Water.	35	$615.00
Number of Acre Feet to be appropriated from reservoir/pond (Only Applies to reservoir/pond constructed under Ground Water Application)	1	$30.00
Number of reservoirs.	1	
Permit Recording Fee. ***		$450.00
* the 1st Water Use is included in the base cost. ** the 1st Ground Water point of appropriation is included in the base cost. *** the Permit Recording Fee is not required when the application is submitted but, must be paid before a permit will be issued. It is fully refundable if a permit is not issued. If the recording fee is not paid prior to issuance of the Final Order, permit issuance will be delayed.	Recalculate	
Estimated cost of Permit Application		$2,545.00

OWRD Fee Schedule

Fee Calculator Version B20130709