



Water Resources Department North Mall Office Building 725 Summer Street NE, Suite A Salem, OR 97301-1271 503-986-0900 FAX 503-986-0904

September 21, 2012

TOBY STADELI 10622 SELAH SPRINGS DR NE SILVERTON, OR 97381

Reference: File G-17540

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 your water-use permit application and to describe your 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 you have supplied, the Water Resources Department has made the following preliminary determinations:

Initial Review Determinations:

- 1. The application proposed the appropriation of 1.0 cubic foot per second (CFS) of water from Well 1 (MARI 6145) in Drift Creek Basin, and Well 2 and Well 3 in Pudding River Basin for primary irrigation of 27.3 acres and supplemental irrigation of 55.1 acres March 1 through October 31 of each year.
- 2. The proposed use is not prohibited by law or rule except where otherwise noted below.
- 3. The appropriation of water from Well 1 (MARI 6145) in Drift Creek Basin, and Well 2 and Well 3 in Pudding River Basin for irrigation is allowable under the Willamette Basin Program.
- 4. The applicant's wells produce/will produce from several water-bearing zones in the Columbia River Basalt Group (CRBG), a series of lava flows with a composite thickness that ranges up to 500 feet in the area. Although unconfined ground water occurs near the surface of the basalts, most water occurs in confined aquifers that occupy thin rubble zones (interflow zones) at the contacts between lava flows. The interiors of the basalt flows generally have low porosity and permeability and act as confining beds. This geometry generally produces a stack of thin aquifers (interflow zones) separated by thick confining beds (flow interiors). The low permeability of the basalt-flow interiors probably limits the natural vertical connection between overlying aquifers. Because the aquifers are confined (storativity is estimated to be 0.0001), pumping impacts will propagate outward at rapid rates and are likely to reach aquifer boundaries (streams, faults, and truncated basalt flow margins) within a fractions of an hour. Therefore, hydraulic interference with nearby wells, springs, and streams will occur rapidly once pumping begins if nearby streams and wells are connected to the same water-bearing zones that are open in the well.

Geologic maps (Tolan and Beeson, 1999) show that southeast of the applicant's wells, the basalts are broken into many fault-bounded blocks. In the area surrounding the applicant's wells, the basalts are overlain by approximately 100 feet of alluvium. A northwest-trending

normal fault is mapped to the east of the applicant's wells, but is concealed by sediments, so its exact location is uncertain. The degree to which this fault impedes horizontal flow or enhances vertical flow of groundwater is also uncertain.

Groundwater declines have been documented in Columbia River Basalt aquifers in many areas on the east side of the Willamette Basin. In fact, several groundwater restricted areas have been created to address the decline problems. The applicant's wells are located southwest of the Mt. Angel Groundwater Limited Area and the Victor Point Groundwater Withdrawn Area, and northwest of The South Salem Hills Groundwater Limited Area. Water-level declines, however, are not limited to these classified areas and occur over a broad area near the towns of Silverton and Mt. Angel. As shown in Figure 2, two groups of wells can be formed on the basis of hydraulic head and water-level trends. Hydraulic heads in wells north of the Mt. Angel fault range from 50 to 100 feet above mean sea level and have been declining at an average rate of 3.4 feet/year. In wells south of the fault, heads range from 110 to 165 feet above mean sea level and have been declining at an average rate of 2.4 feet/year. The applicant's wells are located south of the Mt. Angel fault in the vicinity of several wells that have been experiencing water-level declines.

In the immediate vicinity of the applicant's wells, two distinct water level trends are present among CRBG wells. Water levels in wells located to the west of a concealed fault appear to have declined less than water levels in wells east of the fault (Figure 4). However, the two wells with long-term water levels on the west side of the fault (MARI 6118 and MARI 6153) are not sealed into competent basalt and may commingle the alluvial and basalt aquifers. Water levels for a nearby alluvial well (MARI 17590) are shown on Figure 4 for comparison. The trends in MARI 6118 and MARI 6153 are very similar to the trend in MARI 17590; however the heads in MARI 6118 and MARI 6153 are about 10 feet lower than the head in MARI 17590. This suggests that the water levels in MARI 6118 and MARI 6153 may represent a composite head of the alluvial and basalt aquifer systems.

Any new use from CRBG aquifers is likely to exacerbate water level declines that have been occurring over a large area on the east side of the Willamette Valley. Therefore the Department has determined that ground water is over-appropriated.

- 5. The Department has determined, based upon OAR 690-009, that the proposed ground water use will not have the potential for substantial interference with any surface water source.
- 6. The Department has determined that Well 1 (MARI 6145) does not meet current minimum well construction standards. In order to meet standards, the well must be resealed as there was not enough sealing material used to adequately seal the well.

Prior to the issuance of a permit, evidence demonstrating compliance with well construction standards must be submitted and approved by the Department. In repairing the well(s), you should work closely with the Department and/or a licensed well constructor to ensure that repairs are carried out in a manner that will not violate well construction or other rules. You are encouraged to contact Kris Byrd of the Department's Well Construction and Compliance Section at 503-986-0851 to determine how to proceed.

Please also note that regardless of the outcome of this application, you will need to work with the Department to either repair or abandon the well(s) to comply with the minimum standards for the construction, conversion, alteration, maintenance, and abandonment of water supply wells in order to protect the state's ground water supply (OAR 690-200).

7. Please refer to the <u>Additional Information Required</u> section below for specific information regarding deficiencies with the application.

Summary of Allowable Water Use

Because not all items above are favorable, the appropriation of 1.0 CFS of water, being no more than 0.34 CFS for primary irrigation of 27.3 acres and 0.69 CFS for supplemental irrigation of 55.1 acres March 1 through October 31 of each year, from Well 1 (Mari 6145) in Drift Creek Basin, and Well 2 and Well 3 in Pudding River Basin is not allowable, and it appears unlikely that you will be issued a permit unless a suitable mitigation proposal is provided prior to issuance of the Proposed Final Order. At this time, you must decide whether to proceed or to withdraw your application as described below.

Additional Information Required:

Additional exam fees are required if you chose to proceed and *not* withdraw the application. The total exam fee is \$2000, and the Department has received a total of \$1750; please provide the additional fee of \$250. The fees may have been short due to non-payment of an additional use; note that the Department considers primary irrigation and supplemental irrigation as separate uses.

Category	Fee
Base	\$1000
Up to 1 CFS	\$250
2 additional wells @ \$250 each	\$500
1 additional use @ \$250	\$250
TOTAL EXAM FEES:	\$2000

Please submit this information no later than Thursday, Thursday, October 23, 2012. If you are unable to submit the information listed above, you may request an administrative hold for up to an additional 180 days. You must submit the request in writing, stating how much more time you will need and why you need additional time. If an administrative hold is granted, your application will not be processed further until the requested information is received or the extended deadline has passed. If we do not receive the items requested above or a request for an administrative hold by this date, the Department will likely proceed with a Proposed Final Order recommending denial of the application.

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 \$200 processing charge per application). To accomplish this you must notify the Department in writing by **Friday, October 5, 2012**. 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 totalizing flow meter or other suitable measuring device as approved by the Director at each point of appropriation. The permittee shall maintain the meter or measuring device in good working order.
 - B. The permittee shall keep a complete record of the amount of water diverted each month, and shall submit a 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.
 - C. The permittee shall allow the watermaster access to the meter or measuring device; provided however, where any meter or measuring device is located within a private structure, the watermaster shall request access upon reasonable notice.
 - D. The Director may provide an opportunity for the permittee to submit alternative measuring and reporting procedures for review and approval.
- 2. 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 your 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/NRD/water_agplans.shtml to learn more about the plans and how they may affect your proposed water use.

If you have any questions:

Feel free to call me at 503-986-0859 if you have any questions regarding the contents of this letter or your application. Please have your 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: Jeana Eastman, Oregon Water Resources Department, 725 Summer St NE Ste A, Salem OR 97301-1266. Our fax number is 503-986-0901.

Sincerely,

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Jeana Eastman Water Right Application Caseworker

enclosures: Application Process Description and Stop Processing Request Form

G-17540 WAB 2-no psi POU 2-GW

APPLICATION FACT SHEET

Application File Number: G-17540

Applicant: TOBY STADELI

County: Marion

Watermaster: 16

Priority Date: March 8, 2012

Source: WELL 1 (MARI 6145) IN DRIFT CREEK BASIN, AND WELL 2 AND WELL 3 IN PUDDING RIVER BASIN

Use: PRIMARY IRRIGATION OF 27.3 ACRES AND SUPPLEMENTAL IRRIGATION OF 55.1 ACRES

Quantity: 1.0 CUBIC FOOT PER SECOND

Basin Name & Number: Willamette, #2

Stream Index Reference: Volume 14 DRIFT CR

Point of Diversion or Well Location(s):

WELL 1 (MARI 6145): NWNE, SECTION 8, T7S, R1W, W.M.; 960 FEET SOUTH AND 1350 FEET WEST FROM NE CORNER, SECTION 8

WELL 2: NWNE, SECTION 8, T7S, R1W, W.M.; 20 FEET SOUTH AND 1350 FEET WEST FROM NE CORNER, SECTION 8

WELL 3: NWNW, SECTION 8, T7S, R1W, W.M.; 110 FEET SOUTH AND 1270 FEET EAST FROM NW CORNER, SECTION 8

Place of Use:	QQ	PRIMARY	SUPPLEMENTAL
	NE ¼ NĚ ¼	9.2 ACRES	
	NW ¼ NE ¼	7.7 ACRES	28.4 ACRES
	NE ¼ NW ¼	4.8 ACRES	6.2 ACRES
	NW ¼ NW ¼	4.0 ACRES	19.0 ACRES
	SW 1/4 NW 1/4	1.6 ACRES	1.5 ACRES
		SECTION 8	3
	TOWNSH	IP 7 SOUTH, RAN	GE 1 WEST, W.M.

14 DAY STOP PROCESSING DEADLINE DATE: Friday, October 5, 2012

PUBLIC NOTICE DATE: Tuesday, September 23, 2012

30 DAY COMMENT DEADLINE DATE: Thursday, October 23, 2012

Mailing List for IR Copies Application #G-17540

Original mailed to applicant VIA EMAIL:

TOBY STADELI, 10622 SELAH SPRINGS DR NE, SILVERTON, OR 97381

SENT VIA EMAIL:

- 1. Applicant tstadeli@yahoo.com
- 2. Agent <u>phggek@bctonline.com</u> 3. WRD WM #16

Copies sent to: 1. WRD - File # G-17540 2. WRD - Water Availability: Ken Stahr

Copies Mailed
By: (SUPPORT STAFF)
on:
(DATE)

Caseworker: Jeana Eastman

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