

State of Idaho
Department of Water Resources
Water Right License
WATER RIGHT NO. 37-22783

PRIORITY: October 10, 2012

Maximum Diversion Rate: 0.10 CFS

It is hereby certified that:

MARY C WIRTH 50 LOWER BROADFORD RD BELLEVUE ID 83313 And/Or

BRADLEY S WIRTH 50 LOWER BROADFORD RD BELLEVUE ID 83313

has complied with the terms and conditions of the permit, issued pursuant to Application for Permit dated October 10, 2012, and has submitted Proof of Beneficial Use on October 20, 2017. An examination confirms water is diverted from:

SOURCE:
GROUND WATER

and a water right has been established as follows:

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>DIVERSION RATE</u>	<u>ANNUAL DIVERSION VOLUME</u>
HEATING	01/01 to 12/31	0.06 CFS	18.0 AF
COOLING	01/01 to 12/31	0.06 CFS	18.0 AF
DOMESTIC	01/01 to 12/31	0.04 CFS	

LOCATION OF POINT(S) OF DIVERSION:

GROUND WATER NE¼SE¼ Sec. 35, Twp 02N, Rge 18E, B.M. BLAINE County

PLACE OF USE: DOMESTIC, HEATING, AND COOLING

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
02N	18E	35													X				

CONDITIONS OF APPROVAL

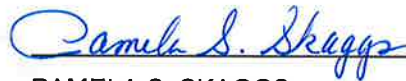
1. Use of water under this right for heating and cooling shall be non-consumptive.
2. Heating and cooling uses are for one household, and when combined shall not exceed a total annual volume of 18 acre-feet.
3. Return flow discharged to a subsurface system must be authorized by a separate injection well permit.
4. Domestic use is for 1 home.
5. The domestic use authorized under this right shall not exceed 13,000 gallons per day.

State of Idaho
Department of Water Resources
Water Right License
WATER RIGHT NO. 37-22783

6. The irrigation occurring under this domestic use shall not exceed 1/2 acre.
7. This right is for the use of trust water, and it is subject to review 20 years after its initial approval date of the permit to re-evaluate the availability of trust water for the authorized use and to re-evaluate the public interest criteria for reallocating trust water.
8. When notified by the Department, the right holder shall install and maintain a measuring device of a type acceptable to the Department as part of the diverting works.

This license is issued pursuant to the provisions of Section 42-219, Idaho Code. The water right confirmed by this license is subject to all prior water rights and shall be used in accordance with Idaho law and applicable rules of the Department of Water Resources.

Signed this 13th day of December, 2018.



PAMELA S. SKAGGS
Water Rights Section Manager

State of Idaho
Department of Water Resources
Attachment to Water Right License
37-22783

This map depicts the HEATING, COOLING, and DOMESTIC place of use boundary for this water right at the time of this approval and is attached to the approval document solely for illustrative purposes.

18E



- Point of Diversion
- Place Of Use Boundary
- Townships
- PLS Sections
- Quarter Quarters

0 0.035 0.07 0.14 Miles





State of Idaho

DEPARTMENT OF WATER RESOURCES

322 E FRONT ST STE 648 PO BOX 83720 • BOISE, ID 83720-0098

Phone: (208)287-4800 • Fax: (208)287-6700 • Website: www.idwr.idaho.gov

C.L. "Butch" Otter
Governor

Gary Spackman
Director

December 19, 2018

BRADLEY S WIRTH
MARY C WIRTH
50 LOWER BROADFORD RD
BELLEVUE ID 83313

RE: License No. 37-22783

Issuance of License

Dear Water Right Holder(s):

The Department of Water Resources ("Department") has issued the enclosed Water Right License confirming that a water right has been established in accordance with your permit. Please be sure to thoroughly review all the conditions of approval listed on your license. The conditions may include ongoing requirements, such as maintenance of a measuring device or implementation of mitigation, as well as information about how your water use may be administered, such as regulation by a watermaster in a water district.

The license is a PRELIMINARY ORDER issued by the Department pursuant to Rule 730 of the Department's Rules of Procedure (IDAPA 37.01.01.730). It can and will become a final order without further action by the Department unless a party petitions for reconsideration, files exceptions, or requests a hearing as described in the enclosed information sheet.

Also, please note that water right owners are required to report any change of water right ownership and/or mailing address to the Department within 120 days of the change. Failure to report these changes could result in a \$100 late filing fee. Water right forms are available from any office of the Department or on the Department's website at idwr.idaho.gov

If you have any questions concerning the enclosed information, please contact me at (208) 287-4951.

Sincerely,

Pamela S Skaggs, Manager
Water Rights Section

Enclosure(s)

CERTIFICATE OF SERVICE

I hereby certify that on December 20, 2018, I served a true and correct copy of Water Right License No. 37-22783 by U.S. Mail, postage prepaid, to the following:

BRADLEY S WIRTH (Current Owner)
50 LOWER BROADFORD RD
BELLEVUE ID 83313

MARY C WIRTH (Current Owner)
50 LOWER BROADFORD RD
BELLEVUE ID 83313

BROCKWAY ENGINEERING PLLC (Representative)
C/O ZACH LATHAM
2016 N WASHINGTON ST STE 4
TWIN FALLS ID 83301



Darla Block
Technical Records Specialist I

EXPLANATORY INFORMATION TO ACCOMPANY A PRELIMINARY ORDER

(To be used in connection with actions when a hearing was not held)

(Required by Rule of Procedure 730.02)

The accompanying order or approved document is a "Preliminary Order" issued by the department pursuant to section 67-5243, Idaho Code. It can and will become a final order without further action of the Department of Water Resources ("department") unless a party petitions for reconsideration, files an exception and brief, or requests a hearing as further described below:

PETITION FOR RECONSIDERATION

Any party may file a petition for reconsideration of a preliminary order with the department within fourteen (14) days of the service date of this order. **Note: the petition must be received by the department within this fourteen (14) day period.** The department will act on a petition for reconsideration within twenty-one (21) days of its receipt, or the petition will be considered denied by operation of law. See Section 67-5243(3) Idaho Code.

EXCEPTIONS AND BRIEFS

Within fourteen (14) days after: (a) the service date of a preliminary order, (b) the service date of a denial of a petition for reconsideration from this preliminary order, or (c) the failure within twenty-one (21) days to grant or deny a petition for reconsideration from this preliminary order, any party may in writing support or take exceptions to any part of a preliminary order and may file briefs in support of the party's position on any issue in the proceeding with the Director. Otherwise, this preliminary order will become a final order of the agency.

REQUEST FOR HEARING

Unless a right to a hearing before the Department or the Water Resource Board is otherwise provided by statute, any person aggrieved by any final decision, determination, order or action of the Director of the Department and who has not previously been afforded an opportunity for a hearing on the matter may request a hearing pursuant to section 42-1701A(3), Idaho Code. A written petition contesting the action of the Director and requesting a hearing shall be filed within fifteen (15) days after receipt of the denial or conditional approval.

ORAL ARGUMENT

If the Director grants a petition to review the preliminary order, the Director shall allow all parties an opportunity to file briefs in support of or taking exceptions to the preliminary order and may schedule oral argument in the matter before issuing a final order. If oral arguments are to be heard, the Director will within a reasonable time period notify each party of the place, date and hour for the argument of the case. Unless the Director orders otherwise, all oral arguments will be heard in Boise, Idaho.

CERTIFICATE OF SERVICE

All exceptions, briefs, requests for oral argument and any other matters filed with the Director in connection with the preliminary order shall be served on all other parties to the proceedings in accordance with IDAPA Rules 37.01.01302 and 37.01.01303 (Rules of Procedure 302 and 303).

FINAL ORDER

The Director will issue a final order within fifty-six (56) days of receipt of the written briefs, oral argument or response to briefs, whichever is later, unless waived by the parties or for good cause shown. The Director may remand the matter for further evidentiary hearings if further factual development of the record is necessary before issuing a final order. The department will serve a copy of the final order on all parties of record.

Section 67-5246(5), Idaho Code, provides as follows:

Unless a different date is stated in a final order, the order is effective fourteen (14) days after its service date if a party has not filed a petition for reconsideration. If a party has filed a petition for reconsideration with the agency head, the final order becomes effective when:

- (a) The petition for reconsideration is disposed of; or
- (b) The petition is deemed denied because the agency head did not dispose of the petition within twenty-one (21) days.

APPEAL OF FINAL ORDER TO DISTRICT COURT

Pursuant to sections 67-5270 and 67-5272, Idaho Code, if this preliminary order becomes final, any party aggrieved by the final order or orders previously issued in this case may appeal the final order and all previously issued orders in this case to district court by filing a petition in the district court of the county in which:

- i. A hearing was held,
- ii. The final agency action was taken,
- iii. The party seeking review of the order resides, or
- iv. The real property or personal property that was the subject of the agency action is located.

The appeal must be filed within twenty-eight (28) days of this preliminary order becoming final. See section 67-5273, Idaho Code. The filing of an appeal to district court does not itself stay the effectiveness or enforcement of the order under appeal.

MEMORANDUM

TO: Water Right Permit File 37-22783

FROM: Daniel A. Nelson

DATE: December 11, 2018

SUBJECT: Addressing Concerns Raised in Erick Powell's November 30, 2018, Email.

Mr. Powell raised some concerns in his November 30, 2018, email that will be addressed in this memo and attached to the file.

The first concern that Mr. Powell expressed a concern regarding the time it has taken to process this license. This is a valid concern, but was unavoidable due to workloads and priorities of the staff reviewing the data associated with this permit. Mr. Powell has been given several opportunities to supply adequate information with the data and calculation used to ensure the information supplied is repeatable and within industry standards. The Department has worked through two sets of data with Mr. Powell, and we have not been able to match Mr. Powell's information with the tools available to the Department.

Mr. Powell's second concern was the need to require a volume for non-consumptive uses. In Mr. Powell's email, he confirms we have discussed this issue previously, so there was no need to go back over the information with Mr. Powell. When viewing a single water right, it is hard to understand the need for requiring a volume for non-consumptive heating and cooling uses that are required by the IDAPA Administrative Rules for Beneficial Use Examinations. However, the Department is tasked with the administration of all water rights, so they must look at all the rights within the state or a single basin, and not just a single right for non-consumptive use.

If the Department did not require a volume for this use, then the water user may feel they could change their system to increase the volumetric use of water as long as they did not exceed the rate of diversion authorized by the license. If permit holder did increase the amount of volume being used without increasing the diversion rate, they would cause injury to junior water users who were granted a license based on the smaller volumetric use developed during the development period. This would also allow the permit holder to call for water that was not developed during the development period that has been developed by other water uses. Therefore, we must abide by the IDAPA Administrative Rules for Beneficial Use Exams and require a volume for this heating and cooling use that was developed and is within industry standards for this size of home.

Mr. Powell then provided several concerns in the calculations provided by Ms. Edl's analysis. Ms. Edl has addressed these concerns in her memo dated December 10, 2018. The adjusted calculations supplied by Ms. Edl did not significantly change the volumes for the heating and cooling. Using the rounded volumes supplied by Ms. Edl, we will move forward with licensing with a cooling volume of 2 af and a heating volume of 16 af for a total volume of 18 af.

MEMORANDUM

Date: December 10, 2018
To: Water Right File 37-22783
From: Michele Edl
Re: re-calculation of volume

At your request, I have recalculated the volume of water used for heating and cooling a 3997 ft²; the space recommended by the examiner for permit #37-22783.

I found that the increase in footprint from 3842 ft² to 3997 ft² has a small impact on the ASHRAE-based calculation for the volume of water used.

I kept the same design heat load for this system 93750 BTU/hr ($75000 + 18750 = 93750$ BTU/hr), which puts it at 23.4 BTU/hr-ft² and down from the 24.0 BTU/hr-ft² used in my first calculation. This flux falls within the range that I have learned to expect (20-60 BTU BTU/hr-ft²) but it is on the low end of the scale. Increasing the space without changing any of the other parameters in my first calculation results in a total volume of 17.5 afa for heating and cooling. Which when compared with my earlier calculation of 18 afa, is not a significant difference.

Nelson, Dan

From: Erick Powell <erick.powell@brockwayeng.com>
Sent: Friday, November 30, 2018 4:33 PM
To: Nelson, Dan
Cc: Edl, Michele; Keen, Shelley; zach.latham@brockwayeng.com
Subject: RE: Water Right Permit 37-22783

Dear Dan,

You will have to forgive me, I feel obligated to get on my virtual soap box for a minute and discuss a few items.

- A. Your email took me by surprise, as we provided the requested information regarding this beneficial use field exam in 2017. IDWR then waited over a year to provide the permit holder any additional feedback. When we received feedback today, we were given 18 working days to respond to the information provided. That seems unreasonable when IDWR was unable to evaluate and provide feedback in a timely manner.
- B. I know that we have had this conversation previously. But it is worth repeating again, I think that it is a waste of tax payer resources and IDWR staff time to quantify the annual volume of non-consumptive heating and cooling permits. These annual volumes are subject to a variety of variables that can change, including (but not limited to) unpredictable weather conditions, personal preference in temperature, efficiency of equipment, and occupancy. IDWR has historically allowed for diversion volumes to account for uncertainties; for example, IDWR has determined an appropriate diversion volume authorized for irrigation use regardless of the crop type, soil type, climate, and other factors. In most cases this diversion volume is an over estimate of the volume of water needed or used during the irrigation season. However, IDWR has allowed irrigators to divert up to the authorized volume, partly because any excess volume returns to the system and is not consumed. Why is IDWR spending so much effort, time, and resources on determine an annual non-consumptive volume, when all of the diverted volume is returned to the system?

Now that I've done with my ranting, here are my responses to Michele's memo. She identified three items that were "problematic".

1. Livable floor space: We took our value from the Wood River Fire and Rescue value of square footage. Reducing the square footage to 3,840 ft² has very little impact to the results (heating volume of 24.7 acft).
2. There were months when our estimated heating requirement exceeded the available load of the system. We did not design the system, so I cannot answer the question as why they were potentially undersized. However, for those months, we concluded the maximum flow rate of 0.06 cfs or 26 gpm was used continuously.
3. We assumed a maximum diversion rate for the system of 26 gpm (the capacity of the units). The difference between Michele's numbers is a rounding issue. The flow rate of 26 gpm is equal to 0.0579 cfs, which over 24 hours is 5,005.35 ft³ or 0.1149 acft/day. And this volume over 31 days is 3.56 acft, not 3.41 acft.

Michele then outlines the methodology that she used to calculate the annual volume. There are also many assumptions in her work, that are unexplained or unsupported. And she acknowledges that the heating volume she calculated ranged between 9 acft and 55 acft depending on assumptions made. My estimate for heating was 25 acft, within the lower range estimated by Michele. Our estimated volume for cooling was 3 acft and Michele's was 2 acft (based on a "very cold year"). Given the amount of uncertainty in all of these values, it is difficult to justify a low ball volume number, when our estimates are within the range calculated by IDWR.

Again, it seems like a waste of time, effort and money to try to minimize the non-consumptive volume on a license paper. Idaho Code {IDAPA 37.03.02.35.j} states that "annual diversion volume shall account for seasonal variation in factors affecting water use, including seasonal variations in water availability." My recommendation to IDWR is to develop a simple metric that would limit the combined volume of heating and cooling. For example, a simple calculation could be X number of months of continuous use (for example, 9 months of 26 gpm would be 31.5 acft). That would be a easy way to ensure flexibility for the home owner and compliance with the IDAPA code, while giving comfort to IDWR that people aren't excessively pumping, using and returning non-consumptive water back to the source.

Regards,
Erick

From: Nelson, Dan <Dan.Nelson@idwr.idaho.gov>
Sent: Friday, November 30, 2018 9:08 AM
To: Erick Powell <erick.powell@brockwayeng.com>
Cc: Edl, Michele <Michele.Edl@idwr.idaho.gov>
Subject: Water Right Permit 37-22783

Hello Erick,

Unfortunately, we were forced to put a hold on the review of the additional information requested for this field report due to numerous reasons, and I apologize for the delay in reviewing your response to our questions concerning the heating and cooling system. I have attached to this email a memo composed by our heating and cooling specialist Michele Eld. Before moving forward with processing the license on this permit, I wanted to give you the opportunity to review and comment or supply additional information if needed. At this time, we are considering following Ms. Eld's suggestions for the annual volumes for heating and cooling regarding this permit.

Due to the holiday season, I have decided to hold the processing of this permit until **January 4th, 2019**, to allow you time to respond to the information in the email. Please feel free to contact either Ms. Eld or myself concerning this matter. If I do not hear from you before January 4th, 2019, I will move forward with licensing this permit with the values discussed in the attached memorandum.

Thank you for your patience, and please don't hesitate to contact us if you have any further questions.

Respectfully,

Daniel Nelson
Water Right Analyst 3
Idaho Department of Water Resources
Telephone (208) 287-4856
Fax (208) 287-6700 (attn: Dan Nelson)