



State of Idaho

DEPARTMENT OF WATER RESOURCES

322 East Front Street • P.O. Box 83720 • Boise, Idaho 83720-0098

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

C.L. "BUTCH" OTTER
Governor

GARY SPACKMAN
Director

November 14, 2013

TIM STEHR
JENNIFER MILLER
1101 CREEK RD
PITMAN PA 17964

RE: License No. 75-7655

Issuance of License

Dear Water Right Holder(s):

The Department of Water Resources 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 the conditions of approval and remarks listed on your license.

The license 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 by the Department unless a party petitions for reconsideration or files an exception and/or brief within fourteen (14) days of the service date as described in the enclosed information sheet.

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. Contact any office of the Department or visit the Department's homepage on the Internet to obtain the proper forms and instructions.

If you have any questions, please contact me at 208-287-4916.

Sincerely,

Craig L. Saxton
Water Rights Supervisor

Enclosure(s)

CERTIFICATE OF SERVICE

I hereby certify that on November 15, 2013, I mailed a true and correct copy, postage prepaid, of the foregoing PRELIMINARY ORDER (Approved License) to the person(s) listed below:

RE: WATER RIGHT NO.

75-7655

**JENNIFER MILLER
1101 CREEK RD
PITMAN PA 17964**

**TIM STEHR
1101 CREEK RD
PITMAN PA 17964**



**Darla Block
Technical Records Specialist**

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.

State of Idaho
Department of Water Resources
Water Right License

WATER RIGHT NO. 75-07655

Priority: July 01, 1997

Maximum Diversion Rate: 0.06 CFS

It is hereby certified that TIM STEHR

And

JENNIFER MILLER
1101 CREEK RD
PITMAN PA 17964

has complied with the terms and conditions of the permit, issued pursuant to Application for Permit dated June 06, 1997; and has submitted Proof of Beneficial Use on July 26, 2011. An examination confirms water is diverted from

SOURCE

TWELVEMILE CREEK

Tributary: SALMON RIVER

and a water right has been established as follows:

BENEFICIAL USE

IRRIGATION

PERIOD OF USE

04/01 to 10/31

DIVERSION RATE

0.06 CFS

LOCATION OF POINT(S) OF DIVERSION:

TWELVEMILE CREEK SE1/4SE1/4 Sec. 36, Twp 20N, Rge 21E, B.M. LEMHI County

PLACE OF USE: IRRIGATION

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
20N	21E	36																2.0	2.0

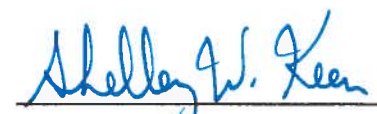
Total Acres: 2

CONDITIONS OF APPROVAL

1. This right when combined with all other rights shall provide no more than 0.03 cfs per acre nor more than 3.5 afa per acre at the field headgate for irrigation of the lands above.
2. Upon specific notification by the Department, the right holder shall install and maintain acceptable measuring device(s), including data logger(s), at the authorized point(s) of diversion, in accordance with Department specifications.
3. A lockable device subject to the approval of the Department shall be maintained on the diverting works in a manner that will provide the watermaster suitable control of the diversion.
4. When notified by the Department or by a watermaster with regulatory authority over this right, the right holder shall report the amount of water diverted in connection with this right. The report shall be submitted in the manner and frequency specified by the Department or the watermaster.

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 14th day of November, 2013.

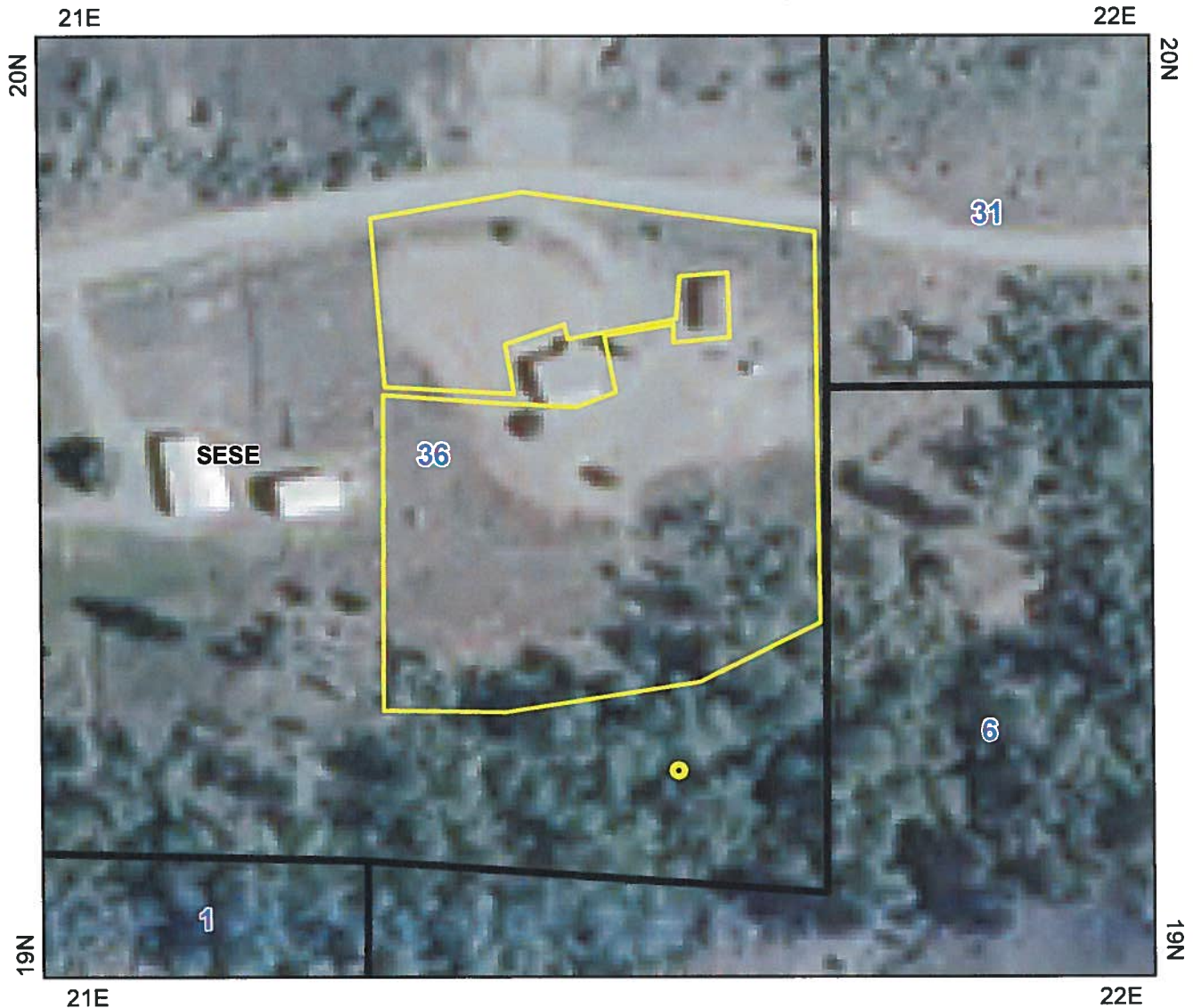

for GARY SPACKMAN
Director

State of Idaho
Department of Water Resources

Attachment To Water Right License

75-7655

This map depicts the IRRIGATION 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.



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

0 0.0125 0.025 0.05 Miles



MEMORANDUM

TO: File 75-7655

FROM: Daniel Nelson – Staff Hydrologist

DATE: November 1, 2013

SUBJECT: Review of Licensing Recommendation

I reviewed the field exam and licensing recommendation for this permit, and felt the theoretical calculation was done according to current protocols.

However, after looking at the photos sent by the owner of the property, I was concerned about using the contour lines on topographical maps to determine the lift for the theoretical calculation. On my second review of the topographical maps, I discovered that there are two designated elevation points at this property. I am assuming that these elevations were done on the road and the other done on the creek bed to determine flood activity for the road construction. The difference in these two points is 6 feet instead of the 40 feet found in the contour lines. The 6 feet of elevation difference also reflects the elevation shown in the pictures.

Using the 6 feet of elevation, the new flow rate would range between 0.06 cfs (28.1 gpm) at 40 psi and 0.04 cfs (19.1 gpm) at 60 psi. The owner states he uses 8 to 10 sprinklers. The pictures show standard Rainbird sprinklers that have 3/32 to 7/32 nozzles. Using the sprinkler nozzle sheet, I discovered that 10- 1/8th in sprinkler nozzles would produce between 2.77 and 2.96 gpm with a 35 to 40 psi rating for an estimated average flow rate of 2.87 cfs per nozzle.

Using the adjusted lift and the comparing that to sprinkler outputs, I am convinced that this system diverts at least 0.06 cfs and 28.1 gpm. Therefore, I have instructed the reviewing agent to change the license to reflect the 0.06 cfs diverted, which is the same amount that water use was permitted.

Please see attachments for calculations.

UNIVERSITY OF IDAHO — FACT SHEET

Hydraulic Relationships and Performance, Soil and Water Relationships

NOZZLE DISCHARGE IN GALLONS PER MINUTE

HYDRAULIC RELATIONSHIPS

*** NOZZLE DIAMETER IN INCHES ***										PRESSURE: (P)*MAY BE IN PSI OR EQUIVALENT FEET OF WATER 1.0 psi = 2.31 feet
psi	3/32	1/8	9/64	5/32	11/64	3/16	13/64	7/32	17/64	
20	1.17	2.09	2.65	3.26	3.92	4.69	5.51	6.37	7.13	FLOW: (Q)*MAY BE IN CFS OR EQUIVALENT GAL. PER MIN. 1.0 cfs = 449 gpm
25	1.31	2.34	2.96	3.64	4.38	5.25	6.16	7.13	7.13	
30	1.44	2.56	3.26	4.01	4.83	5.75	6.80	7.86	7.86	POWER: MAY BE IN KILLOWATTS (KW), WATER HORSEPOWER (WHP), and, ELECT. HORSEPOWER (EHP) 1.0 KW = 1.34 EHP 1.0 EHP = 0.746 KW WHP = Q(gpm) X P(ft) / 3960 KW = 1.732 X V X A X PF/1000
35	1.55	2.77	3.50	4.31	5.18	6.21	7.30	8.43	8.43	
40	1.66	2.96	3.74	4.61	5.54	6.64	7.80	9.02	9.02	EFFICIENCY: (EFF) MAY BE WATER TO WIRE ... WHP / EHP FLUID TO SHAFT .. WHP / SHP
45	1.76	3.13	3.99	4.91	5.91	7.03	8.30	9.60	9.60	
50	1.85	3.30	4.18	5.15	6.19	7.41	8.71	10.10	10.10	VOLUME: ACRE FT. OR ACRE IN. 1.0 cfs = 1.98 AF / DAY 1.0 AF = 12.0 AI
55	1.94	3.46	4.37	5.39	6.48	7.77	9.12	10.50	10.50	
60	2.03	3.62	4.50	5.65	6.80	8.12	9.56	11.05	11.05	Q(gpm) = 30.0 X D(in.) ² X P(PSI) ^{0.5}
65	2.11	3.77	4.76	5.87	7.06	8.45	9.92	11.45	11.45	
70	2.19	3.91	4.96	6.10	7.34	8.78	10.32	11.95	11.95	h = AVERAGE APPLICATION RATE IN INCHES PER HOUR
75	2.27	4.05	5.12	6.30	7.58	9.08	10.66	12.32	12.32	
80	2.35	4.18	5.29	6.52	7.84	9.39	11.02	12.74	12.74	spacing 2 3 4 5 6 7 8 9 10 11 12 spacing
85	2.42	4.31	5.45	6.71	8.07	9.67	11.35	13.11	13.11	
90	2.49	4.43	5.61	6.91	8.31	9.95	11.69	13.51	13.51	feet * * * gallons per minute per sprinkler * * * feet
95	2.56	4.56	5.76	7.09	8.53	10.20	11.99	13.86	13.86	
100	2.63	4.67	5.91	7.29	8.76	10.50	12.32	14.23	14.23	20x20 .48 0.72 0.96 1.20 1.44 1.70 1.93 2.16 2.40 2.64 x.x 20x20

spacing 2 3 4 5 6 7 8 9 10 11 12 spacing	feet * * * gallons per minute per sprinkler * * * feet											
20x20	.48	0.72	0.96	1.20	1.44	1.70	1.93	2.16	2.40	2.64	x.x	20x20
20x30	.32	0.48	0.64	0.80	0.96	1.12	1.28	1.43	1.60	1.76	1.9	20x30
20x40	.24	0.36	0.48	0.60	0.72	0.84	0.96	1.08	1.20	1.32	1.4	20x40
30x30	.21	0.32	0.43	0.54	0.64	0.75	0.88	0.96	1.07	1.17	1.2	30x30
30x40	.16	0.24	0.32	0.40	0.48	0.56	0.64	0.72	0.80	0.88	0.9	30x40
30x50	.13	0.19	0.25	0.32	0.38	0.45	0.51	0.58	0.64	0.70	0.7	30x50
40x40	.12	0.18	0.24	0.30	0.36	0.42	0.48	0.54	0.60	0.66	0.7	40x40
40x50	.10	0.14	0.19	0.24	0.29	0.34	0.38	0.43	0.48	0.53	0.5	40x50
40x60	.xx	0.12	0.16	0.20	0.24	0.28	0.32	0.36	0.40	0.44	0.4	40x60

LONG-TERM BASIC SOIL INFILTRATION RATES		PEAK APPLICATION RATE FOR PIVOTS	
AGGREGATED-STRUCTURED-BARE-OPEN SOIL	POOR SOIL	r; R = rad. of sprinkler and pivot	
Course Sand. (*0.9) > 0.75 - 1.00"/hr.	0.35"/hr.	h = 122.5 X Q(pvt.gpm) / (r X R)	
Fine Sands. (*1.2) > 0.50 - 0.75"/hr.	0.25"/hr.		
Fine S.Loam. (*1.9) > 0.35 - 0.50"/hr.	0.20"/hr.	EXPECTED IRRIGATION EFFICIENCIES	
Silt Loam. (*2.3) > 0.25 - 0.40"/hr.	0.13"/hr.	Sprinkler	50 to 70%
Clay Loam. (*2.2) > 0.10 - 0.30"/hr.	0.07"/hr.	Drop Sprays	60 to 80%
For 10 - minute SHORT-TERM rate, multiply by 6		Level Boarder	50 to 80%
(*X.X) = Aprox. Water Holding Capacity (in./ft.)		Furrow	20 to 50%

THEORETICAL HORSEPOWER EQUATION WORKSHEET (cjh 1/92)

Water Right No.: 75-7655
 Reviewer: Dan Nelson
 Date of Review: 11/1/2013

P/D No.:	Senerio 1	Senerio 2	Senerio 3	
PUMP HORSEPOWER	1	1	1	
BOOSTER HORSEPOWER	0	0	0	
PUMPING LEVEL	6	6	6	
DISCHARGE PRESSURE	40	50	60	
RATE OF FLOW (cfs)	0.06	0.05	0.04	AVE
	28.1	22.8	19.1	23.3

The above calculates the formula =

$$Q = \frac{8.8 * (\text{Efficiency}) * \text{hp}}{\text{depth to water} + 2.31 * (\text{psi}) + \text{friction}}$$

Assumptions: %70 efficiency.
 No Friction

Examiners Notes:

The Reviewing agent used the contours on the topographical map to attain the lift. However, the lift didn't match the sprinkler output for 8 to 10 sprinklers. I relooked at the map, and I found two surveyed elevation points on either side of the road. I would assume the first point of 4439 is the road elevation and 4433 is the elevation of the stream. This is an assumption, but when I change the lift from 40 feet to 6 feet, the gpm rate at 40 psi matches the average output of 10 sprinklers between the 35 psi and 40 psi range. This seems to me to be more reasonable then limiting the diversion rate to 0.04 cfs done on the field examiner's theoretical calculation.

SALIA

36

5685T

486T

5084

Assumed Road
Elevation

Assumed
LIFT
4439
4433
6 FT

4439AT

4600

Twelvemile

4433T

Property
Boundary

Assumed
Check
Elevation

NA

5408T

4800