

State of Idaho
Department of Water Resources
Water Right License
WATER RIGHT NO. 63-33721

PRIORITY: December 13, 2012

Maximum Diversion Rate: 1.42 CFS

It is hereby certified that:

HOOT NANNEY FARMS INC C/O MICHAEL L DIXON 8542 FLOATING FEATHER RD STAR ID
83669-5255

has complied with the terms and conditions of the permit, issued pursuant to Application for Permit dated December 13, 2012, and has submitted Proof of Beneficial Use on June 07, 2016. 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>
IRRIGATION	03/01 to 11/15	1.42 CFS

LOCATION OF POINT(S) OF DIVERSION:

GROUND WATER L1 (NE¼NE¼) Sec. 3, Twp 04N, Rge 01W, B.M. ADA County
GROUND WATER L4 (NW¼NW¼) Sec. 3, Twp 04N, Rge 01W, B.M. ADA County
GROUND WATER L4 (NW¼NW¼) Sec. 3, Twp 04N, Rge 01W, B.M. ADA County
GROUND WATER L4 (NW¼NW¼) Sec. 3, Twp 04N, Rge 01W, B.M. ADA County(Injection)
GROUND WATER L4 (NW¼NW¼) Sec. 3, Twp 04N, Rge 01W, B.M. ADA County(Rediversion)

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	
04N	01W	3						39.0 L 4	38.0			38.0							115.0
04N	01W	4	39.0 L 1			38.0									38.0				115.0

Total Acres: 230

CONDITIONS OF APPROVAL

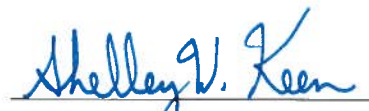
1. Rights 63-2958, 63-31988, 63-32010, and 63-33721 when combined shall not exceed a total diversion rate of 4.80 cfs, a total annual maximum diversion volume of 1080.0 af at the field headgate, and the irrigation of 240 acres.
2. Rights 63-2958, 63-31988, and 63-33721 when combined shall not exceed a total diversion rate of 3.82 cfs.
3. The right holder shall maintain totalizing measuring devices approved by the Department to measure and record the rate and volume of ground water diverted in connection with this right. The right holder shall measure flow from the wells, record the maximum flow for a given month, measure and record the total volume of water diverted for each month, and measure and record the total volume of water diverted each year from the wells. The right holder shall maintain these records for a minimum of 10 years and shall make those records available to the Department for inspection at any given time.
4. Upon specific notification of the Department, the right holder shall install and maintain data loggers to record water usage information at the authorized points of diversion in accordance with Department specifications.

State of Idaho
Department of Water Resources
Water Right License
WATER RIGHT NO. 63-33721

5. Upon specific notification by the Department, the right holder shall install and maintain an acceptable measuring device, including data logger, at the authorized point of diversion, in accordance with Department specifications.
6. The ground water source for this right shall be limited to water bearing formations no deeper than 200 feet below ground surface.
7. Ground water diverted from the two points of diversion in Govt. Lot 4 (NWNW), Section 3, Township 4N, Range 1W is injected into Little Gulch Creek and rediverted from Little Gulch Creek.
8. If the surface water right 63-32010 is unavailable for any reason other than drought or curtailment by priority (for example abandoned, forfeited, sold, transferred, leased, used on another place of use, or disallowed by court decree), the right holder shall not divert ground water for irrigation purposes on the land with appurtenant surface water rights without an approved transfer pursuant to Section 42-222, Idaho Code, or approval of the Department if a transfer is not required.
9. The right holder shall make full beneficial use of Right 63-32010 and shall limit the diversion of ground water under this right to those times when the Right 63-32010 is not available or is not reasonably sufficient to irrigate the place of use authorized under this right.
10. This right when combined with all other rights shall provide no more than 0.02 cfs per acre nor more than 4.5 afa per acre at the field headgate for irrigation of the place of use.
11. The diversion and use of water described in this right may be subject to additional conditions and limitations agreed to by the protestant and the right holder under a separate agreement to which the Department is not a party. Because the Department is not a party, the Department is not responsible for enforcement of any aspect of the agreement not specifically addressed in other conditions herein. Enforcement of those portions of the agreement not specifically addressed in other conditions shall be the responsibility of the protestant and the water right holder.
12. When ordered by the Director, the right holder shall provide mitigation acceptable to the Director to offset depletion of lower Snake River flows needed for migrating anadromous fish. The amount of water required for mitigation, which is to be released into the Snake River or a tributary for this purpose, will be determined by the Director based upon the reduction in flow caused by the use of water pursuant to this right. Any order of the Director issued in accordance with this paragraph shall be in conformance with applicable rules allowing the right holder due process as the need for mitigation and the amount of mitigation are determined.

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 31st day of August, 2016.



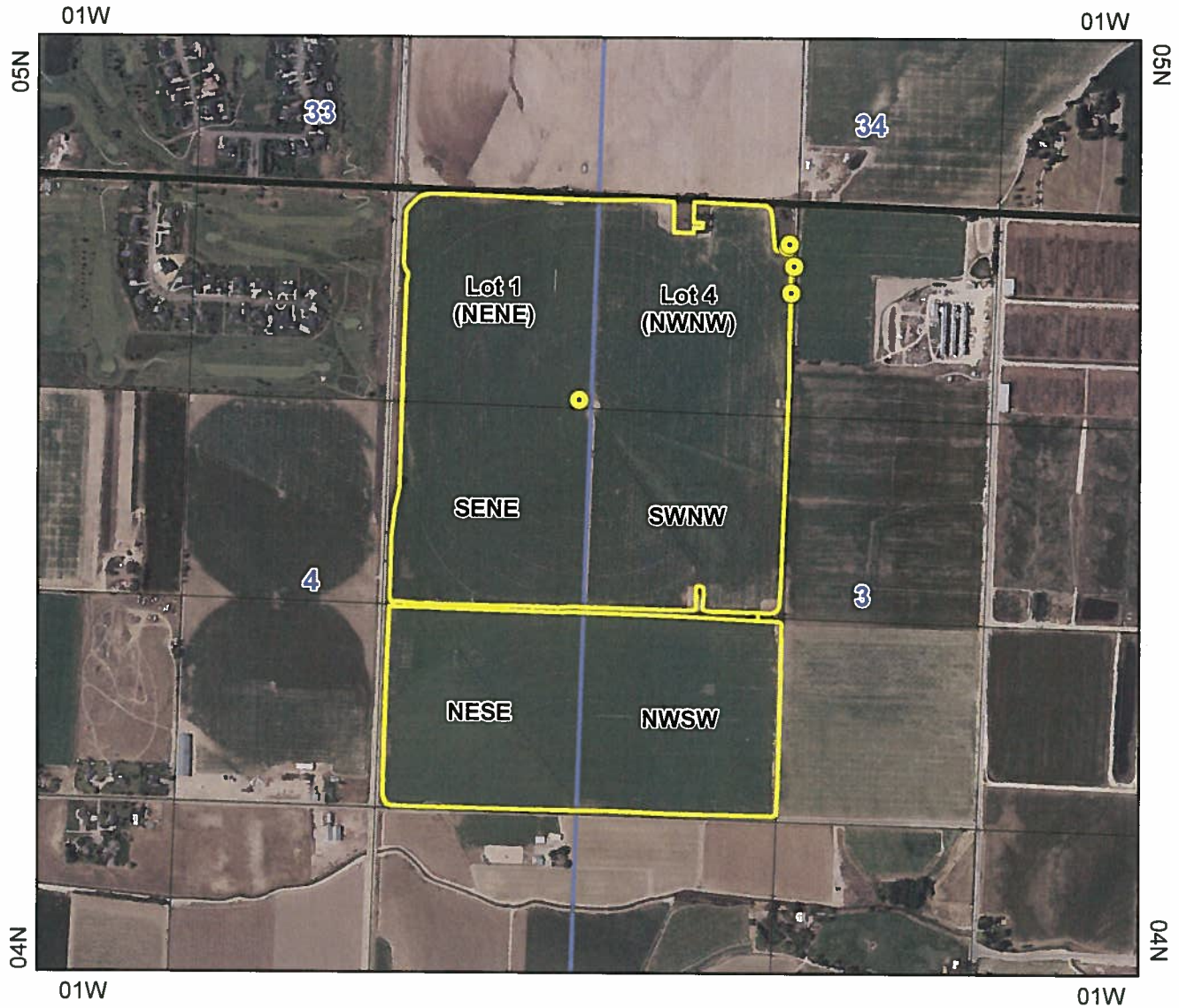
SHELLEY W. KEEN
Water Rights Section Manager

State of Idaho
Department of Water Resources

Attachment to Water Right License

63-33721

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

0 0.125 0.25 0.5 Miles



State of Idaho
Department of Water Resources
APPLICATION FOR AMENDMENT
(For Licensing Purposes)
WATER RIGHT NO. 63-33721

RECEIVED

AUG 31 2016

DEPARTMENT OF
WATER RESOURCES

PRIORITY: December 13, 2012

Maximum Diversion Rate: 1.42 CFS

Comes now

HOOT NANNEY FARMS INC C/O MICHAEL L DIXON 8542 FLOATING FEATHER RD STAR ID
83669-5255

and represents to the Idaho Department of Water Resources that he is the owner and holder of Permit to
Appropriate the Public Waters of the State of Idaho No. 63-33721, and requests that the permit be
changed as follows:

SOURCE:
GROUND WATER

BENEFICIAL USE
IRRIGATION

PERIOD OF USE **DIVERSION RATE**
03/01 to 11/15 1.42 CFS

LOCATION OF POINT(S) OF DIVERSION:

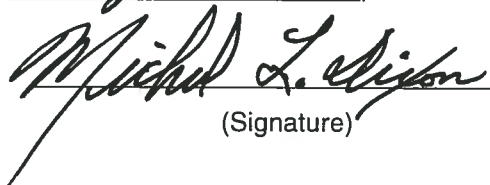
GROUND WATER L1 (NE $\frac{1}{4}$ NE $\frac{1}{4}$) Sec. 3, Twp 04N, Rge 01W, B.M. ADA County
GROUND WATER L4 (NW $\frac{1}{4}$ NW $\frac{1}{4}$) Sec. 3, Twp 04N, Rge 01W, B.M. ADA County
GROUND WATER L4 (NW $\frac{1}{4}$ NW $\frac{1}{4}$) Sec. 3, Twp 04N, Rge 01W, B.M. ADA County
GROUND WATER L4 (NW $\frac{1}{4}$ NW $\frac{1}{4}$) Sec. 3, Twp 04N, Rge 01W, B.M. ADA County(Rediversion)
GROUND WATER L4 (NW $\frac{1}{4}$ NW $\frac{1}{4}$) Sec. 3, Twp 04N, Rge 01W, B.M. ADA County(Injection)

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	
04N	01W	3						39.0 L 4	38.0			38.0							115.0
04N	01W	4	39.0 L 1			38.0									38.0				115.0

Total Acres: 230

Permit holder asserts that no one will be injured by such change and that such change will be made at
permit holder's own risk. Signed this 30 day of August, 2016.


(Signature)

State of Idaho
Department of Water Resources
APPLICATION FOR AMENDMENT
(For Licensing Purposes)
WATER RIGHT NO. 63-33721

FOR DEPARTMENT USE ONLY

Preliminary check by _____ Fee = \$100⁰⁰ Received by A.O. # C102441 Date 8/31/2016

ACTION OF THE DEPARTMENT OF WATER RESOURCES

The Idaho Department of Water Resources hereby approves the above Application for Amendment for Permit No. 63-33721 with the following:

CONDITIONS OF APPROVAL

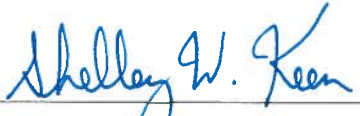
1. Rights 63-2958, 63-31988, 63-32010, and 63-33721 when combined shall not exceed a total diversion rate of 4.80 cfs, a total annual maximum diversion volume of 1080.0 af at the field headgate, and the irrigation of 240 acres.
2. Rights 63-2958, 63-31988, and 63-33721 when combined shall not exceed a total diversion rate of 3.82 cfs.
3. The right holder shall maintain totalizing measuring devices approved by the Department to measure and record the rate and volume of ground water diverted in connection with this right. The right holder shall measure flow from the wells, record the maximum flow for a given month, measure and record the total volume of water diverted for each month, and measure and record the total volume of water diverted each year from the wells. The right holder shall maintain these records for a minimum of 10 years and shall make those records available to the Department for inspection at any given time.
4. Upon specific notification of the Department, the right holder shall install and maintain data loggers to record water usage information at the authorized points of diversion in accordance with Department specifications.
5. Upon specific notification by the Department, the right holder shall install and maintain an acceptable measuring device, including data logger, at the authorized point of diversion, in accordance with Department specifications.
6. The ground water source for this right shall be limited to water bearing formations no deeper than 200 feet below ground surface.
7. Ground water diverted from the two points of diversion in Govt. Lot 4 (NWNW), Section 3, Township 4N, Range 1W is injected into Little Gulch Creek and rediverted from Little Gulch Creek.
8. The right holder shall make full beneficial use of Right 63-32010 and shall limit the diversion of ground water under this right to those times when the Right 63-32010 is not available or is not reasonably sufficient to irrigate the place of use authorized under this right.

State of Idaho
Department of Water Resources
APPLICATION FOR AMENDMENT
(For Licensing Purposes)
WATER RIGHT NO. 63-33721

9. If the surface water right 63-32010 is unavailable for any reason other than drought or curtailment by priority (for example abandoned, forfeited, sold, transferred, leased, used on another place of use, or disallowed by court decree), the right holder shall not divert ground water for irrigation purposes on the land with appurtenant surface water rights without an approved transfer pursuant to Section 42-222, Idaho Code, or approval of the Department if a transfer is not required.
10. This right when combined with all other rights shall provide no more than 0.02 cfs per acre nor more than 4.5 afa per acre at the field headgate for irrigation of the place of use.
11. The diversion and use of water described in this right may be subject to additional conditions and limitations agreed to by the protestant and the right holder under a separate agreement to which the Department is not a party. Because the Department is not a party, the Department is not responsible for enforcement of any aspect of the agreement not specifically addressed in other conditions herein. Enforcement of those portions of the agreement not specifically addressed in other conditions shall be the responsibility of the protestant and the water right holder.
12. When ordered by the Director, the right holder shall provide mitigation acceptable to the Director to offset depletion of lower Snake River flows needed for migrating anadromous fish. The amount of water required for mitigation, which is to be released into the Snake River or a tributary for this purpose, will be determined by the Director based upon the reduction in flow caused by the use of water pursuant to this right. Any order of the Director issued in accordance with this paragraph shall be in conformance with applicable rules allowing the right holder due process as the need for mitigation and the amount of mitigation are determined.

This amendment is issued pursuant to the provisions of Section 42-211, Idaho Code.

Signed this 31st day of August, 2016.

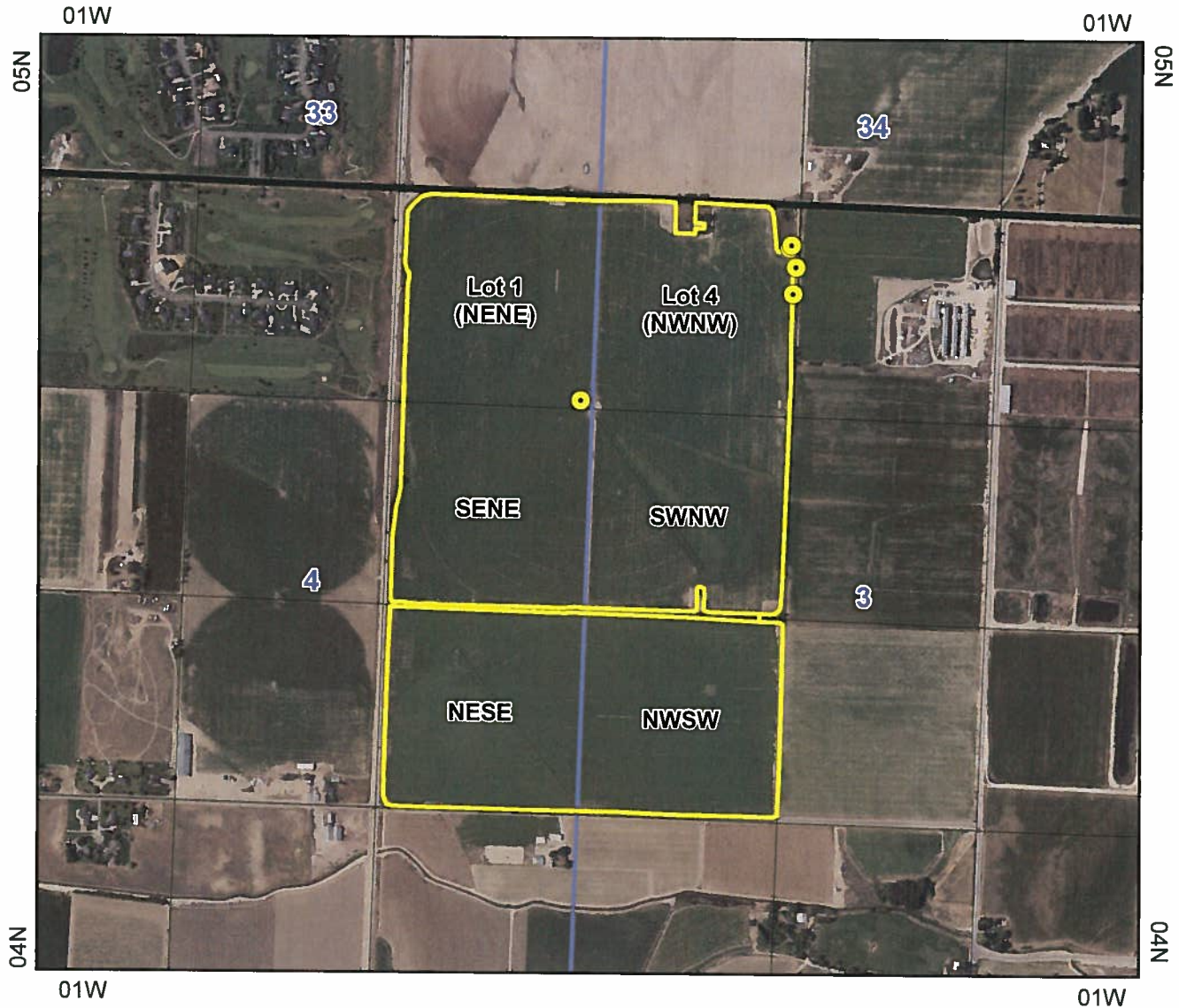

SHELLEY W. KEEN
Water Rights Section Manager

State of Idaho
Department of Water Resources

Attachment for Application to Amend a Permit

63-33721

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

0 0.125 0.25 0.5 Miles





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

September 1, 2016

HOOT NANNEY FARMS INC
C/O MICHAEL L DIXON
8542 FLOATING FEATHER RD
STAR ID 83669-5255

RE: License No. 63-33721

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. Also enclosed is a copy of the approved application for amendment.

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 208-287-4951.

Sincerely,

Pamela Skaggs

Water Rights Supervisor

Enclosure(s)

CERTIFICATE OF SERVICE

I hereby certify that on September 2, 2016, 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.

63-33721

**HOOT NANNEY FARMS INC
C/O MICHAEL L DIXON
8542 FLOATING FEATHER RD
STAR ID 83669-5255**



**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

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

August 29, 2016

HOOT NAMMEY FARMS INC
C/O MICHAEL L DIXON
8542 FLOATING FEATHER RD
STAR ID 83669-5255

RE: Water Right Permit No. 63-33721

Dear Permit Holders:

The Department of Water Resources is reviewing the permit referenced above prior to issuing a water right license. By issuing a license, the Department confirms the extent of development that has been established in compliance with the terms of the permit. The examiner who verified your water use reported that certain elements of the permit have been developed differently than described on your permit. Changes that do not increase the authorized use of water under the permit can be requested and approved in accordance with Section 42-211, Idaho Code. Before a license can be issued, your permit must be amended to depict your water use as it was actually developed.

A field examination was performed by Dave Shaw of ERO Resources for this permit on July 24, 2015 and June 3, 2016. The field examiner discovered that the new well was actually developed in the Government Lot 1 (NE $\frac{1}{4}$ NE $\frac{1}{4}$) of Section 4, Township 4 North Range 1 West, instead of the Government Lot 4 (NW $\frac{1}{4}$ NW $\frac{1}{4}$) of Section 3, Township 4 North Range 1 West requested in the permit. The permit must be corrected prior to licensing.

The enclosed Application for Amendment form depicts the elements of the water right as they will appear on the license when it is issued. Please review the amendment form carefully. If you concur with the information presented, please sign the form and return it with the \$100.00 filing fee by September 12, 2016.

If you have any questions, please don't hesitate to contact me.

Sincerely,

Daniel A. Nelson
Staff Hydrologist
Planning Bureau
Idaho Department of Water Resources
Telephone # (208) 287-4856
Email – dan.nelson@idwr.idaho.gov

MEMORANDUM

TO: Water Right File 63-33721

FROM: Daniel Nelson – Staff Hydrologist

DATE: August 5, 2016

SUBJECT: Licensing Review of Water Right 63-33721

This field exam was performed by Certified Field Examiner Dave Shaw of ERO Resources Corp. Mr. Shaw reported that 229.7 acres were irrigated and limited the diversion rate to 1.42 cfs. No volume was assigned to the permit. The cover letter also requested that the data logger requirement be removed with an understanding that the permit holder needs to record annual diversions and report those diversion if or when required. There are a couple of issues that need to be addressed. Each will be addressed below:

History:

In order to understand this permit, some history of the overlapping water rights is necessary. Water right 63-2958 was originally filed for this property for irrigation of 120 acres from a single well for 2.40 cfs and 558 af. Water right 63-31988 was then filed as an enlargement right for 124 acres in the SRBA for 1.16 cfs and 522 af. When water rights 63-2958 and 63-31988 are combined they are limited to 2.40 cfs, 1080 af, and 240 acres. Water rights 63-2958 and 63-31988 allow 4.5 af of water per acre, which is the standard for this area.

Water right license 63-32010 was licensed with an 11/3/2004 for water from Little Gulch Creek. This right is basically a wastewater right, but it is from a known source. This right was licensed for 1.00 cfs of water for 232 acres of irrigation. When water rights 63-2958, 63-31988, and 63-2010 are combined, they are limited to 240 acres and annual diversion volume of 1080 af.

Water right transfer 78338 was filed with permit 63-33721. The transfer added 2 new points of diversion to water rights 63-2958 and 63-31988 for a total of 3 points of diversion. The water right shows 5 diversion points. One of five diversions is a point of injection into the pond and another is the point of re-diversion from the pond. The 3 remaining points of diversion included the original well, a replacement well that was drilled in 2003, and 1 proposed point of diversion.

Permit 63-33721 was filed to include the original well, the replacement well and the proposed new point of diversion. This permit was filed for an additional 2.40 cfs from the 5 diversion points discussed above.

On December 3, 2015, the Department received a certified field exam report and proof of beneficial use for permit 63-33721. This exam only showed the new well and did not provide any measurements or proof of a measurement device on the two older wells. After corresponding back forth with the certified examiner, Mr. Shaw withdrew the original field report and proof of beneficial use.

On June 7, 2016, a second certified field report and proof of beneficial use was filed by Mr. Shaw for permit 63-33721. The second field report has a cover letter where Mr. Shaw requests that the data logger requirement be waived. This memo will use the second field report to make a recommendation for the licensing of this permit.

Wells and Overlap:

Mr. Shaw included all three wells in the second field report. As stated above, water rights 63-2958 and 63-31988 are diverted from these three wells. Mr. Shaw places the new well in the middle of the 40 acre tracts, but lists the well as being in the Lot 1 (NENE). The well driller report provides a GPS location for the well that is also in the Lot 1 (NENE). I will use the GPS location provided by the well driller, since Mr. Shaw didn't supply any GPS data, and only used aerial photos to determine the location of the new well. Therefore, an amendment will be needed to correct the location of the new point of diversion. A transfer will also be needed on water rights 63-2958 and 63-31988 to correct the legal description for those water rights. I will use the existing water right points of diversion for the other two wells, and the permit points for the point of injection and the point of redirection.

Acres and Overlap:

Mr. Shaw stated that 229.7 acres were being irrigated. Mr. Shaw didn't use the standard rounding requirements for the acre per 40 acre tract, so the licensed acreage may be a bit different than the numbers provided by Mr. Shaw. However, I was able to replicate Mr. Shaw's acre numbers exactly, so I feel his recommendation that 229.7 acres were irrigated is accurate. Water rights 63-2958, 63-31988 and wastewater right 63-32010 allow up to 240 acres to be irrigated. Therefore, the combined limitation conditions for this permit will limit the use to 240 acres, even though it is high unlikely that amount of ground has been irrigated on this property.

Diversion Rate:

Mr. Shaw provided measurements from the recently installed flow meters showing that new well flow meter showed a diversion rate of 209.7 gpm, and the newly installed flow meter on the two existing wells had a flow rate of 1,506 gpm for a total diversion rate of 1,715.7 gpm or 3.82 cfs. Mr. Shaw subtracted the two existing water rights diversion limit of 2.40 cfs from the measured rate to come up with an additional diversion rate of 1.42 cfs. This is a reasonable rate of diversion, and this permit will be limited to the 1.42 cfs. I ran a theoretical calculation of the three wells and came up with a diversion rate within 11% of the amount measured. I am bit concerned about the installation of the flow meter on the new well, and would have liked an independent measurement to confirm its accuracy. I do think that measurements taken by Mr. Shaw were reasonably accurate, if not a bit low, so I recommend that we license this permit based on Mr. Shaw's flow rate measurements of the wells.

When combined with water rights 63-2958 and 63-31988, the diversion rate should be limited to 3.82 cfs. The surface water right 63-32010 adds the possibility of an additional 1.00 cfs. When the 1.00 cfs from 63-32010 is added onto the capacity of the three wells, there is a possibility that the total diversion rate would exceed the 0.02 cfs per acre limitation or 4.80 cfs for the 240 acres. Therefore, there should also be a condition that limits this permit and 63-2958, 63-31988, and 63-32010 to 4.80 cfs.

Volume:

Mr. Shaw did not include a volume in the field report, which is standard practice for supplemental wells. This permit does have supplemental conditions, and is supplemental to the wastewater right. Rob Whitney visited this site in the past, and confirmed that the majority of the water in Little Gulch Creek is wastewater and not very reliable. In essence, the ground water wells are the main supply of water to this property.

The overlapping water rights already have conditions that limit the amount of water diverted to 4.5 acre feet per acre, so I feel it is reasonable to not include a volume on this permit and carry those conditions onto this license.

Waiving of the Data Logger Requirement:

I composed a memo dated January 25, 2016 discussing the need of data loggers for this system. I don't believe that data loggers are necessary at this time for this system, but I do believe that we should retain the ability to require the data loggers in the future if necessary. I am concerned that Mr. Shaw in the request to remove the data logger requirement didn't include a frequency of reading of the meters, but I feel we can require regular monitoring through the conditions on the license.

I recommend that we require the permit holder to read and record the monthly readings of the flow meters, and to make those records available to the Department upon request. This is a standard requirement we have instituted in the past in lieu of requiring data loggers when there is not a watermaster actively monitoring diversions and reporting the monthly diversions to the Department. Recently licensed water right 63-32103 altered condition R19 to include retain records as needed for the Department. This alteration of condition R19 should be used on this license.

Conditions:

This permit requires an amendment, so the following conditions should be included on the amendment to show how the license will look if it is approved.

Condition 1 (020) should be kept, but updated to current version of this condition. Conditions 2, 4, 7 (197), 8 (065), 10 (X35), and 11 (R65) should be carried forward to licensing as shown on the permit. Conditions 3 (046) and 12 (004) should be removed at license, since condition 3 is no longer relevant and none of the water or the water system leaves the owner's property. Condition 5 (115) should be waived and replaced with conditions 213 and R19. Since the data logger condition is waived, condition 6 (067) should be replaced with an updated version of R19 similar to the condition used on water right 63-32003, which states the following:

The right holder shall maintain totalizing measuring devices approved by the Department to measure and record the rate and volume of ground water diverted in connection with this right. The right holder shall measure and record the entire volume of water diverted under this right and shall make the records available to the Department for inspection at any time.

Condition 9 (104) should be replaced with condition 105 per standards. Condition 13 (121) should be changed to condition 103 per standards. Condition F06 should be added to the license to show that all three ground water rights are diverted from the same points of diversion. A second condition X35 should be added to limit the groundwater diversions from the three wells to 3.82 cfs, 1080 af, and 240 acres when all three ground water rights are combined.

THEORETICAL HORSEPOWER EQUATION WORKSHEET (cjh 1/92)

Water Right No.: 63-33721
 Reviewer: Dan Nelson
 Date of Review: 12/10/2016

P/D No.:

PUMP HORSEPOWER
 BOOSTER HORSEPOWER

PUMPING LEVEL

DISCHARGE PRESSURE

RATE OF FLOW (cfs)

Scenario 1
30
0
95
15
1.43
640

Scenario 2
40
0
95
15
1.90
853

New Well
25
0
95
70
0.60
269

Totals
 3.93
 1761.90

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 well driller's report for the new well says this system operates with a 66 foot drawdown from a static water level of 29 feet providing a pumping level of 95 feet. The field examiner stated that the pumps were 30 Hp and 40 Hp for the two existing wells and a 25 Hp pump in the new well. The measured flow rates were 1,506 gpm from the two older wells and 210 gpm from the new well. A field exam done on permit 63-32010 states that the system operated with a pressure of between 65 and 70 psi to the sprinklers, and the two older wells are open discharge. Using the theoretical calculations, these pumps should be operating slightly above what the measurements show. There measurement location for the older well looks like a very good location, but I am a bit concerned about the location of the measurement device on the new well. I would have liked to had a independent measurement on the new well, but I feel that measurements are close enough to the theoretical calculation to state that the measurements are reasonable.

