

State of Idaho
Department of Water Resources
Water Right License
Water Right No. 65-22827

Priority: January 14, 2003

Maximum Diversion Rate: 0.77 CFS

Maximum Diversion Volume: 96.7 AF

It is hereby certified that:

VAN DEUSEN RANCH INC C/O JAMES LITTLE
PO BOX 68 EMMETT ID 83617

has complied with the terms and conditions of the permit, issued pursuant to Application for Permit dated January 14, 2003, and has submitted Proof of Beneficial Use on October 27, 2004. An examination confirms water is diverted from:

Source: BISSEL CREEK

Tributary: PAYETTE RIVER

<u>Beneficial Use</u>	<u>Period of Use</u>	<u>Rate of Diversion</u>	<u>Annual Volume</u>
IRRIGATION STORAGE	01/01 to 12/31		96.7 AF
IRRIGATION FROM STORAGE	03/01 to 11/15		96.7 AF
DIVERSION TO STORAGE	12/01 to 09/01	0.77 CFS	

Location of Point(s) of Diversion

BISSEL CREEK SW¼ SW¼, Sec. 20, Twp 08N, Rge 01W, B.M. GEM County

Place of Use: IRRIGATION STORAGE

Twp	Rng	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
08N	01W	18												X			X		
08N	01W	19		X	X	X	X			X									

Place of Use: IRRIGATION FROM STORAGE

Twp	Rng	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
07N	02W	2		3.3 L2			25.0 L3		20.0	5.3		4.0							57.6
08N	01W	19			1.3	8.4					20.0	7.0 L3	23.0 L4	40.0	15.0	25.0	9.9	1.3	150.9
08N	01W	30					24.0	35.0 L1	38.0 L2	16.0	16.0	38.0 L3	38.0 L4	32.0			7.0		244.0
08N	01W	31		28.0		19.0	6.3	X L1											53.3
08N	01W	32							12.0	0.3	28.0	24.0		5.6		8.0	15.0		92.9
08N	02W	25	1.2			19.0								7.0	38.0	8.4	36.0	39.0	148.6
08N	02W	35			2.4	27.0								12.0	39.0	27.0	29.0	39.0	175.4
08N	02W	36	39.0	39.0	37.0	14.0	33.0	2.1	39.0	39.0	30.0	39.0	19.0	1.7		2.9			334.7

Total Acres: 1,257.4

Conditions of Approval

1. Rights 65-2016, 65-2025, 65-2498, 65-2499, 65-2953, 65-7061, 65-12382, 65-22827, and 65-22828 when combined shall not exceed the irrigation of 1305.2 acres.

SCANNED

AUG 29 2023

State of Idaho
Department of Water Resources
Water Right License
Water Right No. 65-22827

2. Rights 65-2953, 65-7061, 65-22827, and 65-22828 authorize the storage of an annual total of 1,322 acre-feet.
3. This right when combined with all other rights shall provide no more than 0.02 cfs per acre nor more than 3.5 afa per acre at the field headgate for irrigation of the lands above.
4. The right holder shall maintain a means acceptable to the department to measure the amount of water entering the reservoir and the amount of water released from the reservoir.
5. Use of water under this right will be regulated by a watermaster with responsibility for the distribution of water among appropriators within a water district. At the time of this approval, this water right is within State Water District No. 65.
6. The following rights are diverted through point(s) of diversion described above: 65-2016, 65-2025, 65-2953 and 65-22828.
7. The diversion and use of water described in this right may be subject to additional conditions and limitations agreed to by the protestant(s) and the right holder under separate agreement to which the Department is not a party and which may be enforceable by a court of law.
8. 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 Idaho Code § 42-219. 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 25th day of August, 20 23.

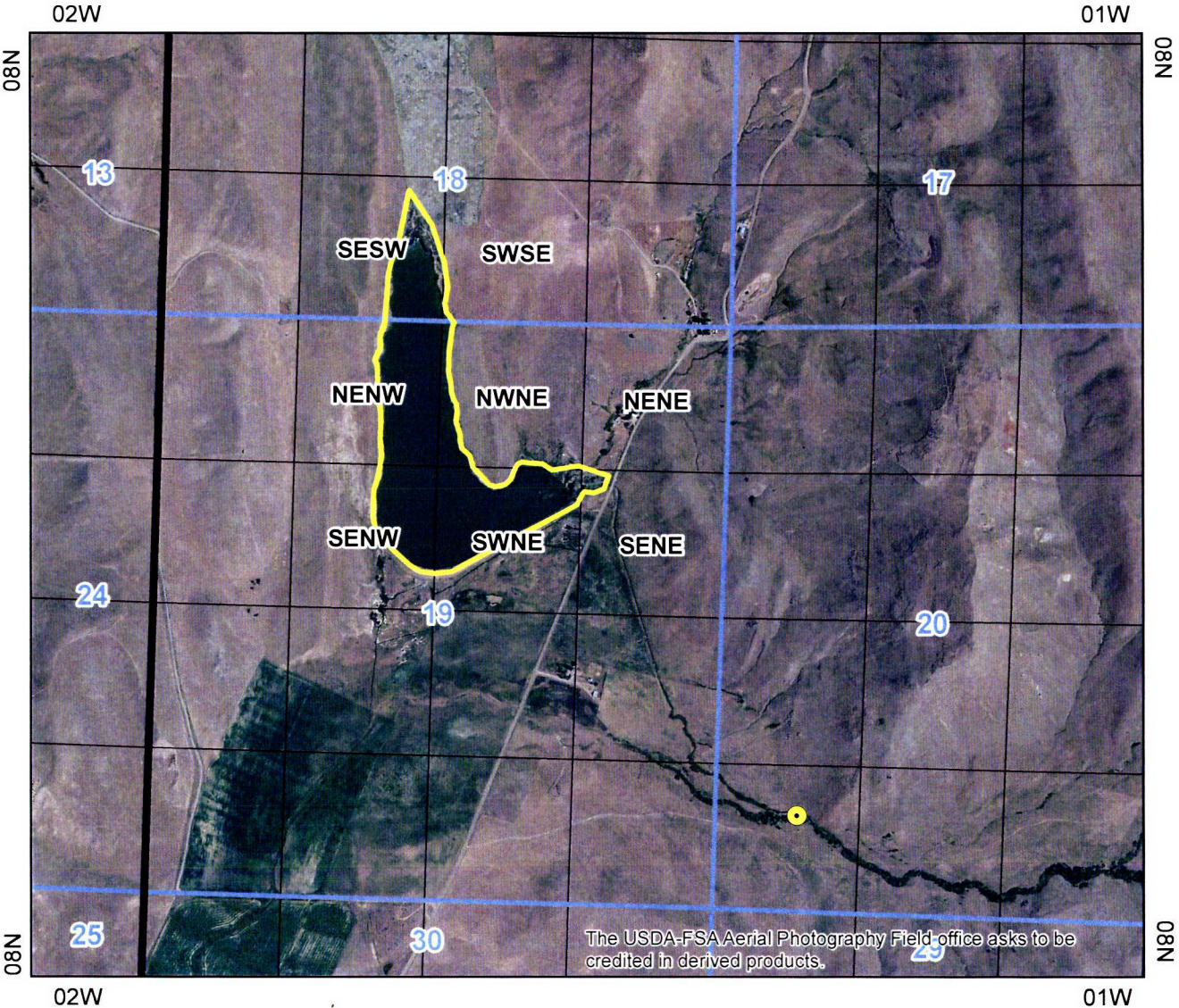


PHILL HUMMER
Water Rights Supervisor

SCANNED
AUG 29 2023

State of Idaho
Department of Water Resources
Attachment to Water Right
65-22827

This map depicts the IRRIGATION STORAGE 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.

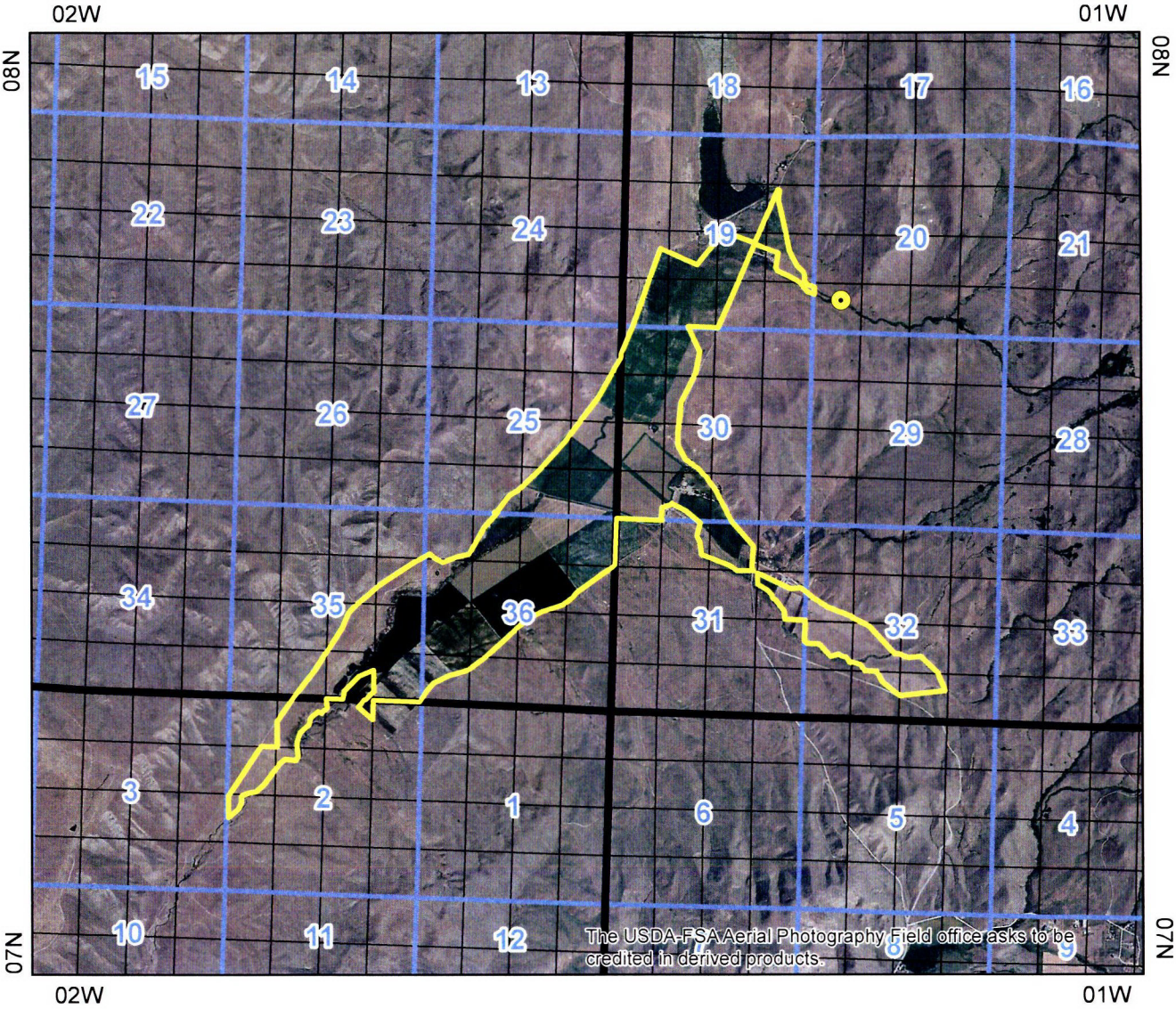


- Place Of Use Boundary
- Townships
- PLS Sections
- Quarter Quarters
- Point of Diversion

SCANNED
AUG 29 2023

State of Idaho
Department of Water Resources
Attachment to Water Right
65-22827

This map depicts the IRRIGATION FROM STORAGE 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.



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

SCANNED N
AUG 29 2023

State of Idaho
Department of Water Resources
Application for Amendment
(For Licensing Purposes)
Water Right No. 65-22827

RECEIVED

FEB 14 2022

DEPARTMENT OF
WATER RESOURCES

Priority: January 14, 2003

Maximum Diversion Rate: 0.77 CFS

Maximum Diversion Volume: 96.7 AF

The owner and holder of Permit to Appropriate the Public Waters of the State of Idaho No. 65-22827

VAN DEUSEN RANCH INC C/O JAMES LITTLE
PO BOX 68 EMMETT ID 83617

requests the permit be changed as follows:

Source : BISSEL CREEK

Tributary: PAYETTE RIVER

Beneficial Use

IRRIGATION STORAGE
IRRIGATION FROM STORAGE
DIVERSION TO STORAGE

Period of Use

01/01 to 12/31
03/01 to 11/15
12/01 to 09/01

Rate of Diversion

0.77 CFS

Annual Volume

96.7 AF
96.7 AF

Location of Point(s) of DiversionBISSEL CREEK SW $\frac{1}{4}$ SW $\frac{1}{4}$, Sec. 20, Twp 08N, Rge 01W, B.M. GEM County**Place of Use: IRRIGATION STORAGE**

Twp	Rng	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
08N	01W	18												X			X		
08N	01W	19		X	X	X	X			X									

Place of Use: IRRIGATION FROM STORAGE

Twp	Rng	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
07N	02W	2		3.3 L2			25 L3		20	5.3		4.0							57.6
08N	01W	19			1.3	8.4					20	7.0 L3	23 L4	40	15	25	9.9	1.3	150.9
08N	01W	30					24	35 L1	38 L2	16	16	38 L3	38 L4	32			7.0		244.0
08N	01W	31		28		19	6.3												53.3
08N	01W	32							12	0.3	28	24		5.6		8.0	15		92.9
08N	02W	25	1.2			19								7.0	38	8.4	36	39	148.6
08N	02W	35			2.4	27								12	39	27	29	39	175.4
08N	02W	36	39	39	37	14	33	2.1	39	39	30	39	19	1.7		2.9			334.7

Total Acres: 1,257.4

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 10th day of February, 2022.


(Signature)

SCANNED

AUG 23 2022

State of Idaho
Department of Water Resources
Application for Amendment
(For Licensing Purposes)
Water Right No. 65-22827

RECEIVED
FEB 14 2022
DEPARTMENT OF
WATER RESOURCES

FOR DEPARTMENT USE ONLY

Preliminary check by _____ Fee = \$100 Received by KU # C111931 Date 2.14.22

ACTION OF THE DEPARTMENT OF WATER RESOURCES

The Idaho Department of Water Resources hereby approves the above Application for Amendment for Permit No. 65-22827 with the following:

Conditions of Approval

1. Rights 65-2016, 65-2025, 65-2498, 65-2499, 65-2953, 65-7061, 65-12382, 65-22827, and 65-22828 when combined shall not exceed the irrigation of 1305.2 acres.
2. Rights 65-2953, 65-7061, 65-22827, and 65-22828 authorize the storage of an annual total of 1,322 acre-feet.
3. This right when combined with all other rights shall provide no more than 0.02 cfs per acre nor more than 3.5 afa per acre at the field headgate for irrigation of the lands above.
4. The right holder shall maintain a means acceptable to the department to measure the amount of water entering the reservoir and the amount of water released from the reservoir.
5. Use of water under this right will be regulated by a watermaster with responsibility for the distribution of water among appropriators within a water district. At the time of this approval, this water right is within State Water District No. 65.
6. The following rights are diverted through point(s) of diversion described above: 65-2016, 65-2025, 65-2953 and 65-22828.
7. The diversion and use of water described in this right may be subject to additional conditions and limitations agreed to by the protestant(s) and the right holder under separate agreement to which the Department is not a party and which may be enforceable by a court of law.
8. 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 Idaho Code § 42-211.

Signed this 25th day of August, 2023.



PHILL HUMMER
Water Rights Supervisor

SCANNED
AUG 29 2023



IDAHO DEPARTMENT OF
WATER RESOURCES

322 E Front Street, Suite 648, Boise ID 83702 • PO Box 83720, Boise ID 83720-0098
Phone: 208-287-4800 • Fax: 208-287-6700 • Email: idwrinfo@idwr.idaho.gov • Website: idwr.idaho.gov

Governor Brad Little

Director Gary Spackman

August 28, 2023

VAN DEUSEN RANCH INC
C/O JAMES LITTLE
PO BOX 68
EMMETT ID 83617

RE: License No. 65-22827

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. 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) 287-4925.

Sincerely,

Jean Hershey

For

Phill Hummer

Water Rights Supervisor

Enclosure(s)

SCANNED

AUG 29 2023

CERTIFICATE OF SERVICE

I hereby certify that on August 28, 2023, I served a true and correct copy of Water Right License No. 65-22827 by U.S. Mail, postage prepaid, to the following:

VAN DEUSEN RANCH INC (Current Owner)
C/O JAMES LITTLE
PO BOX 68
EMMETT ID 83617

ERO RESOURCES CORP (Representative)
C/O DAVE SHAW
802 S PLAZA RD
EMMETT ID 83617-9114

WATER DISTRICT #65
NEIL SHIPPY - WD 65 (Watermaster)
102 N MAIN ST
PAYETTE ID 83661-2522



Jean Hersley
Technical Records Specialist 2

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.



IDAHO DEPARTMENT OF
WATER RESOURCES

322 E Front Street, Suite 648, Boise ID 83702 • PO Box 83720, Boise ID 83720-0098
Phone: 208-287-4800 • Fax: 208-287-6700 • Email: idwrinfo@idwr.idaho.gov • Website: idwr.idaho.gov

Governor Brad Little

Director Gary Spackman

02/01/22

VAN DEUSEN RANCH INC
C/O JAMES LITTLE
PO BOX 68 EMMETT ID 83617

RE: Water Rights No. 65-22827 & 65-22828 – POU Amendment

Dear Permit Holder,

On October 27, 2004, the Department received the Beneficial Use Field Report conducted by David Shaw at ERO Resource Corp. The Report identified the place of use for water rights 65-22827 and 65-22828 by a place of use table that mirrors previous recognized water rights. The report did not list a place of use for the storage component of the permits. Using aerial imagery it is clear the reservoir used to store water under these permits is located in both sections 18 and 19 of township 8 N, range 1 W. Therefore, the permit must be amended to include these locations. The enclosed amendments reflect this change to both permits as well as the other water elements and conditions that will be incorporated into the license upon approval. Please inspect both documents and sign and return them so that licenses can be issued. Thank you for your attention to these matters.

Respectfully,

Phill Hummer
Water Rights Supervisor

Cc: State of Idaho Dept of Lands
David Shaw, ERO Resources LLC (via email)

SCANNED
AUG 29 2023

MEMORANDUM

TO: Water Right File 65-22827 and 65-22828

FROM: Daniel Nelson – Analyst 3

DATE: November 26, 2019

SUBJECT: Licensing Review of Water Right 65-22827 and 65-22828

The field exam for this right was performed by Certified Water Right Examiner Dave Shaw of ERO Resources Corporation in 2004. Unfortunately, these field reports were not examined when received, so there are some exceptions that may be needed due to the amount of time it has taken to review these files.

History:

This permit was originally filed as a single application for permit (65-22765) by David Little Farms Inc., which later changed its name to Van Deusen Ranch Inc. (VDR). In the remarks of the application for permit 65-22765, the permit holder stated the following:

The purpose of this application is to make up the portion of the Bissel Creek diversion transferred to Corral Creek under a companion Application for Transfer to recognize the historic diversion of water from Corral Creek. The application does not seek to increase the total amount of storage beyond the 1,344 af decreed under right number 65-2953 or to increase the total number of irrigated acres beyond 1,300.8 af.

It should be noted that water right 65-2953 was actually decreed for 1.322 acre-feet (af). Which is the same volume found in the dam safety records for this reservoir.

VDR didn't own all the lands listed on the permit but did have a grazing lease with the Idaho Department of Lands (IDL). IDL then protested the application for permit 65-22765 to have the lands they owned removed from the permit. To resolve the protest from the IDL, the permits were split to show the actual owners of the land for these two permits. Permit 65-22827 is owned by VDR and Permit 65-22828 is owned by IDL.

Mr. Shaw recommended that permit 65-22827 in the name of IDL be licensed for 0.03 cubic feet per second (cfs) for diversion to storage and 96.7 af for the irrigation storage and irrigation from storage to irrigated 1257.4 acres of ground. Mr. Shaw also stated that the source for this permit is located within Water District 65, but during the time that water is available for storage, there has never been a need for the watermaster to make regulations on Bissel Creek.

Mr. Shaw recommended that permit 65-22828 in the name of VDR be licensed for 0.03 cfs for diversion to storage and 3.3 af for the irrigation storage and irrigation from storage to irrigated 1257.4 acres of ground. Mr. Shaw also stated that the source for this permit is located within Water District 65, but during the time that water is available for storage, there has never been a need for the watermaster to make regulations on Bissel Creek.

Mr. Shaw only listed the overlapping water rights, and he didn't go into a detailed review of the existing water rights on the farm and how they relate to these permits. I will address this issue throughout this memorandum.

Overlap:

There are number of rights overlapping this permit. Water rights 65-2016, 65-2025, 65-2498, 65-2499, 65-2953, 65-7061, 65-12382, 65-22827, and 65-22828 all irrigate the same 1305.2 acres. The combination of these rights is not additive, so most of these rights have a combined limitation condition on them to limit the total irrigation to 1305.2 acres. This should be carried forward on these permits to avoid confusion when reviewing these water rights.

Water rights 65-2953, 65-7061, 65-22827, and 65-2282 are diverted into the same 1,322 af reservoir from Bissel Cree (65-22827 and 65-22828), Sucker Cree (65-7061), and Corral Creek (65-2953). All three of these rights are diverted into the same ditch from Bissel Creek. The Sucker Creek and Corral Creek rights are diverted into Bissel Creek and rediverted into the reservoir. There also appears to be some unnamed streams that divert into the reservoir, but there are no water rights for those streams. Water right 65-2953 authorizes a total storage volume of 450 af. Water right permit 65-22827 requests a storage volume of 96.7 af and water right permit 65-22828 requests a storage volume of 3.3 af.

Water right 65-12382 is for a separate reservoir on Bissel Creek downstream of the reservoir discussed in these permits. There is no need to include this water right's storage into the storage for these permits since they are different facilities.

Water rights 65-2016 and 65-2025 are diverted directly from Bissel Creek, and water rights 65-2498 and 65-2499 are diverted from ground water. There is no authorization for storage on any of these 4 water rights.

There are also a number of stockwater rights on this property, but they shouldn't be an issue. Some of the rights above include a stockwater component, but they are inclusive with the irrigation rights, so they shouldn't be an issue.

Point of Diversion:

There are no issues with the point of diversion. The permit does list the point of diversion to the 10-acre tract which is no longer necessary. The license will show the point of diversion to the 40-acre tract to match our current standards.

Place of Use:

The original place of use for the storage component had all of the storage in Section 19, but the reservoir is clearly in Section 19 and Section 18. **An amendment will be needed to correct the place of use for the storage place of use.**

Mr. Shaw recommended the same place of use described in earlier water rights that were decreed in the Snake River Basin Adjudication. The 2004 aerial imagery suggest that a large portion of the property northwest of the creek in Section 35 in Township 8 North, Range 2 West, and Section 2 in Township 7 North, Range 2 West were not irrigated. There also appears to be a field in the NESE and SESE of Section 19 in Township 8 North, Range 2 West that also doesn't appear to be irrigated in the 2004 aerial imagery. There were areas around the home in the SW ¼ of Section 30 in township 8 North, Range 2 West that also doesn't appear to be irrigated.

Landsat satellite imagery does suggest that there may have been irrigation that might have taken place on the lands northwest of the creek in September of 2004, but the satellite imagery doesn't confirm any year round irrigation in the other areas described above.

Since it took so long to review this field report, I checked later imagery, and I came up with similar results. The water use for this permit is for irrigation storage and irrigation from storage, so that does allow the Department to look at this type of system a little differently. Idaho code §42-222 state the following in part:

.... The transfer of the right the use of stored water for irrigation purposes shall not constitute and enlargement in use of the original right even though more acres may be irrigated, if no other water right are injured thereby....

This portion of the code states that transferring irrigation from storage water rights to a larger place of use than what was originally licensed does not constitute an enlargement of the storage right. If we license less acres than what were actually irrigated in 2004, the permit holders of these permits could come back into the Department and file a water right transfer to place them back to where Mr. Shaw recommended them without enlarging the water rights.

Therefore, it doesn't seem prudent to reduce the number of acres recommended by Mr. Shaw, even though they did not appear to be fully irrigated in 2004. I recommend that we should license the same place of use that was recommended in the field report. I did follow the standard round protocol of rounding the decimal to the nearest acre. This will change to the total acre amount to 1,257 acres instead of the 1257.4 acres listed on the permit for 65-22827 and 43 acres instead of the 43.4 acres listed on permit 65-22828.

A combined condition will be needed to ensure that additional acres are not irrigated when all of the rights are combined. Whereas the conditions on the existing water rights did not follow the current rounding protocol, the condition will match water right 65-2853 acreage amount, and will be written as follows:

Rights 65-2016, 65-2025, 65-2498, 65-2499, 65-7061, 65-12382, 65-22827, and 65-22828 when combined shall not exceed the irrigation of 1305.2 acres.

Diversion Rate:

Mr. Shaw didn't actually measure the ditch delivering the water from Bissel Cree, but he did a time fill measurement using the staff gauge in the reservoir over a 15 hour and 5-minute period. This is not an ideal method of measurement for a system this large, but it did provide a reasonable estimate of actual flow of water into the reservoir. During this long of test, some of the water would have evaporated and/or seeped out of the reservoir, so the measurement is probably low. Due to the long period from the time this report was received and this review, I don't feel we would be able to get a good representation of the amount of water diverted during the development period.

I do disagree with the table Mr. Shaw used for his calculations. Mr. Shaw provided a rating table for the reservoir that cannot be found in any of the water right or dam safety files, and Mr. Shaw didn't provide any provenance to reference this table to the reservoir. The table Mr. Shaw supplied is for a reservoir that has 1,738 af at the top of the flash boards. The dam safety files show that the reservoir has a volume of 1,228 af at the top of the spillway, and a maximum volume of 1,322 af at the top of the flashboards. In the original application for permit, the permit holder stated that the reservoir volume was 1,344 af, the same as the decreed amount of 65-2953, which was decreed for a total volume of 1,322 af. In the review memo for water right transfer 70376, Department staff stated the reservoir volume was 1,322 af. Considering these factors, a volume of 1,322 af seems to be the official volume of record.

The surface area for the reservoir in the dam safety file is 92 acres. I could only find approximately 63 acres of reservoir surface are based on the high-water lines in the 1980 through 2017 aerial imagery. To get to 92 acres, the reservoir would flood out several of the irrigated fields north of the reservoir. The aerial photos available to the Department show that the reservoir has never had a surface area larger than the outline of the reservoir in my analysis. However, the dam safety staff account for maximum storage not average storage, so we should go with their calculations for maximum reservoir capacity.

Using Mr. Shaw's time method, I calculated the volumes based on both the 92 acres surface area found in the dam safety file and the 63 acres surface area I found. Please see the attached worksheet for my calculations. I determined that at a surface area of 92 acres, the diversion rate would be 61.99 cfs, and at a surface area of 63 acres the diversion rate would be 45.45 cfs based on 15 hour and 5-minute time fill calculation.

Water right 65-2953 authorizes a diversion rate of 22.10 cfs; water right 65-7061 authorizes a diversion rate of 3.00 cfs; and these permits were filed for 0.77 cfs for permit 65-22827 and 0.03 cfs for 65-22828. With all four rights combined the permit holder is seeking a total diversion rate of 25.90 cfs ($22.10 + 3.00 + 0.77 + 0.03 = 25.90$ cfs). The dam safety file states that the system is capable of handling 150 cfs for a 100-year flood event, and 250 cfs for a 500-year flood event. I am recommending the permitted amount for each of these water right permits and no combined condition should be needed, since the rights are additive.

Storage Volume:

Mr. Shaw did not calculate a total volume for this reservoir. Mr. Shaw did supply the rating table he used to calculate the diversion rate, but he didn't provide any provenance as to where the rating table came from, or when and how the rating table was developed. The rating table that the reservoir capacity is 1.738 af.

The application for permit stated that the permit holder was not seeking any additional volume than the 1,322 af that was authorized in decreed water right 65-2953, and the dam safety files confirm the maximum volume available in this reservoir is 1,322 af. I recommend that 96.7 af be recommended for permit 65-22827 and 3.3 af be recommended for 65-22828 for irrigation storage and irrigation from storage.

A combined condition will be needed to limit the total storage volume when water rights 65-2953, 65-7061, 65-2827, and 65-22828 are combined, they are limited to a total combined irrigation storage and irrigation from storage volume of 1,322 af.

Measurement Device Condition:

Both permits have a condition that states the following:

Prior to diversion of water under this right, the right holder shall provide a means acceptable to the Department to measure the amount of water entering the reservoir and the amount of water released from the reservoir.

The language of this condition is vague as to the how the water is to be measured and to the type of measurement device that would be needed. This field report was submitted in 2004 and no correspondence has been sent to the permit holder that the measurement devices were inadequate. The permit holder does have a staff gauge on the reservoir, and the watermaster could calculate the low rate based on the time fill method that was done by Mr. Shaw.

Due to the time that has expired since this report was received, I don't feel it is reasonable to require measurement devices to be installed before and after the reservoir at this time. I do feel that we should allow the watermaster to determine what is needed to properly regulate this reservoir. This condition was also part of a stipulated agreement, so I feel we should carry this condition forward to licensing. This condition will also allow the watermaster the ability to require better measurement requirements if they are needed. \

Conditions:

Both water rights carry almost the same conditions. Permit 65-22828 has a special condition that was required as part of the settlement agreement. The condition will be carried forward to license of 65-22828. The remaining conditions are the same on both rights and will be licensed with the same conditions. Conditions R05, X36, 18C, R63, and 020 will be carried forward to licensing. Condition 121 will be changed to condition 103 as is standard. Tow combined limitation condition will be added to both these permits. An X35 condition will be needed to limit the acres. A 259 condition will also be needed to limit the storage volume.

Permits 65-22827 and 65-22828 Diversion Rate Calculations

Surface Area of Reservoir in Acres	Difference of Reservoir Hieght in feet	correction factor	Total Acre Feet	Total Cubic Feet	Total Seconds	CFS
92	2.1	0.4	77.28	3366316.8	54300	61.99478453
63	2.1	0.4	52.92	2305195.2	54300	42.45295028

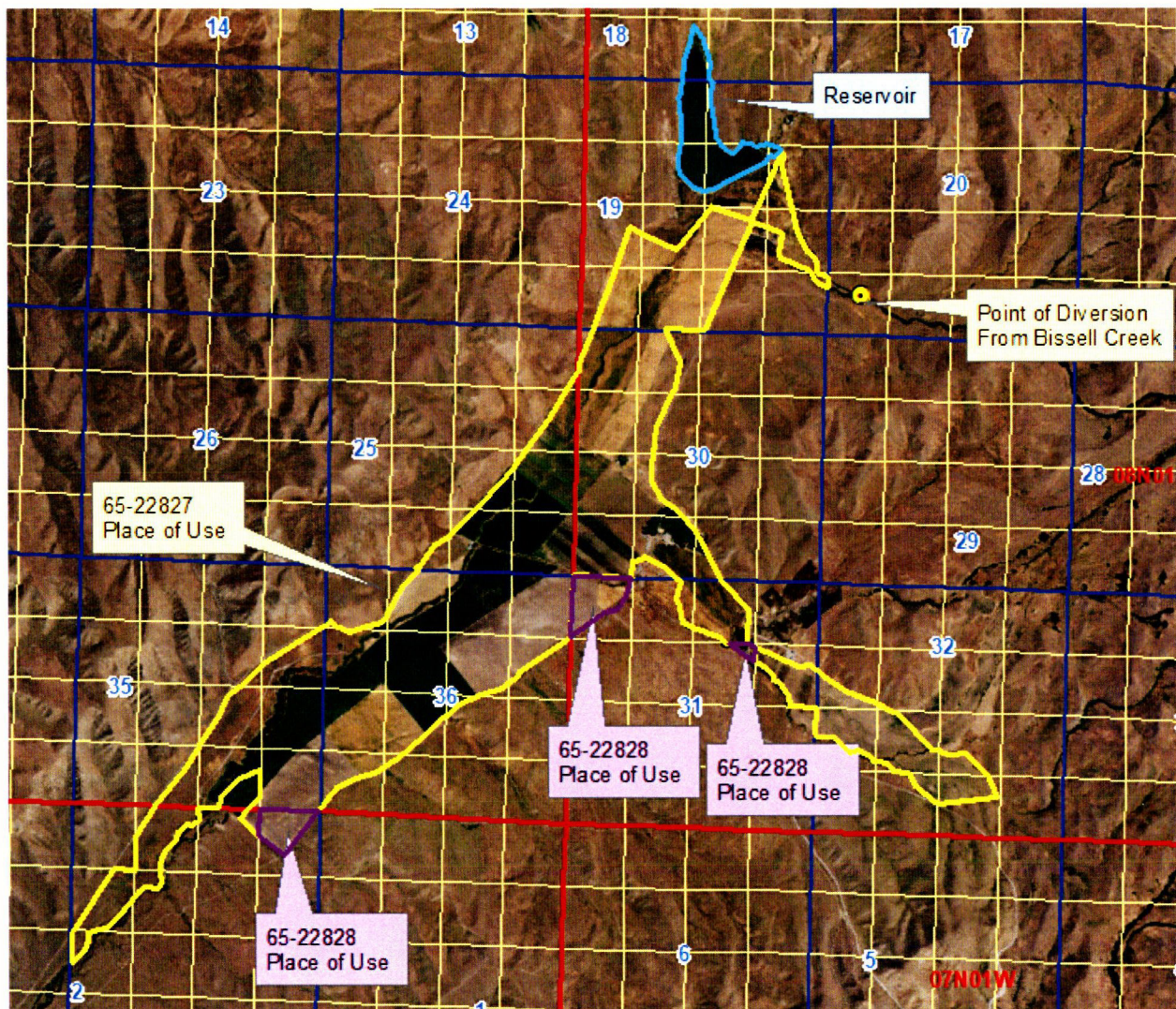
Hours	Minutes	Seconds
15	900	54000
	5	300
		54300

Mr. Shaw stated that it tookd 15 hours and 5 minutes to raise the water level a total of 2.1 feet. Mr. Shaw then supplied a reservoir rating chart for a reservoir with a total volume of 1,738 af. However, the dam safety file shows the reservoir level at the top of the flash boards is actually 1.332 af, which matches the fvolumes listed in the application for permit for these permit. , and the volume shown in water right transfer 70376. I am more inclded to go with the 42.45 cfs calculated using the volume I found using the historic high water marks of 63 acres. A diversion rate of 42.45 cfs would still be above the maximum allowable diversion rate for these two permit. Any further permitting of this system should require a better measurement device than a timed fill. There is simply too much room for error on a system this lartge.

SCANNED
AUG 29 2023

Permits 65-22827 and 65-22828 Licensing Review Maps

The 2019 NAIP imagery below shows the place of use and points of diversion. The yellow dot is the point of diversion from Bissell Creek. The reservoir is in the blue border. The yellow border is the irrigation from storage border for 65-22827, and the purple border is the irrigation from storage border for 65-22828.

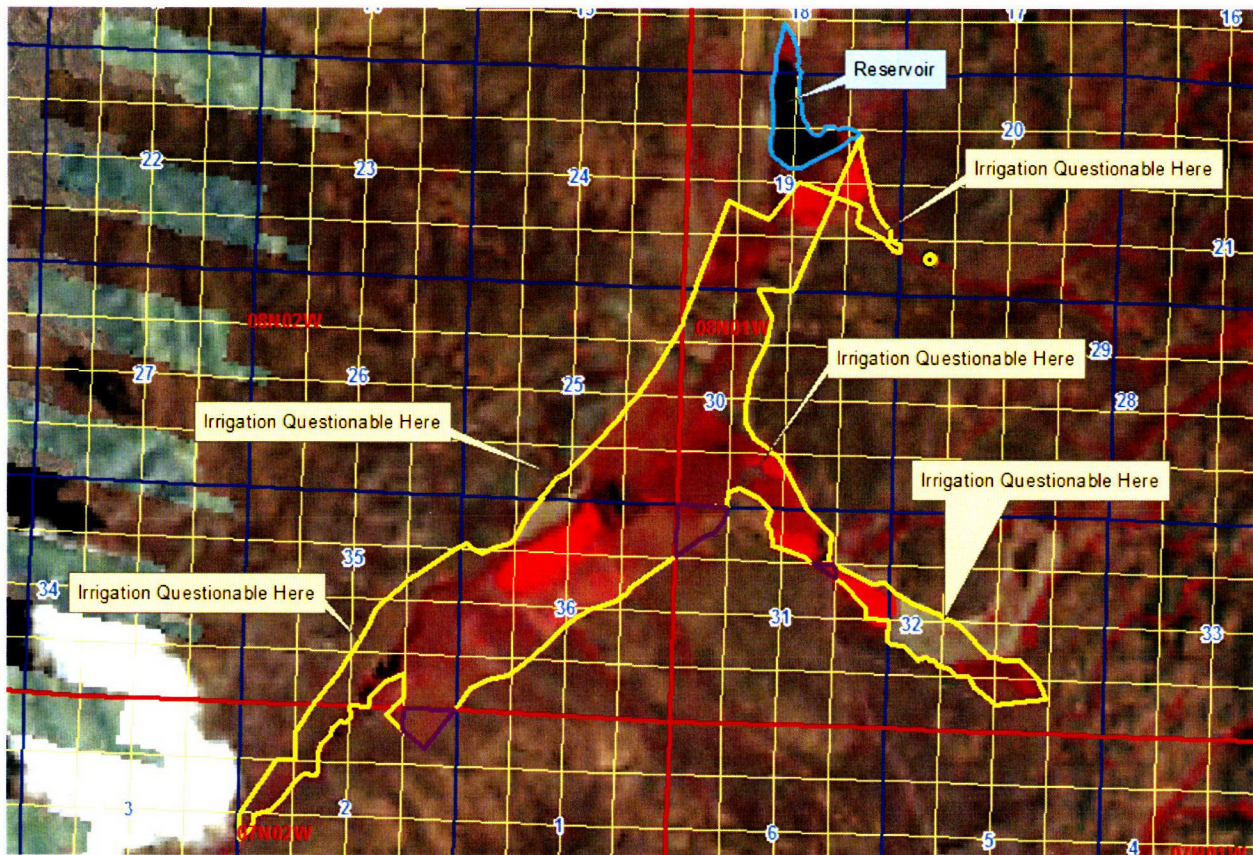


SCANNED

AUG 29 2023

Irrigation Review permits 65-22827 and 65-22828

The image below is a 2004 LandSat imagery that shows possible irrigation in red and the non-irrigation in the muted colors. As you can see there are several areas that irrigation is questionable during the development period, but irrigation from storage can be placed on lands not previously irrigated without resulting in an enlargement of the water right. Therefore, we can allow the entire place of use recommended by the field examiner.



SCANNED
AUG 29 2023

Nelson, Dan

From: Rauhut, Manuel
Sent: Tuesday, November 26, 2019 3:31 PM
To: Nelson, Dan
Subject: Little

- PORTIONS OF PROJECT ALSO ON QUAD NO V57-SQUAW BUTTE
- STORAGE CAPACITY IS ~1322 AC-FT W/ FLASHBOARDS.
- ABSENT FLASHBOARDS, RESERVOIR STORAGE IS 1228 AF
- RUNOFF CAN BE DIVERTED INTO POOL FROM BISSEL CREEK

OUTLET:

- REHABILITATED WITH 12" HDPE LINER IN 2006
- BUTTERFLY VALVE INSTALLED DS (PRESSURIZED CONDITIONS)
- LAST VIDEO IS OF OLD CMP PIPE AFTER HYDRO CLEANING.

SPILLWAY:

- CONCRETE BOX HAS SLOTS FOR FLASHBOARDS.
- RELEASE CAPACITY CALCULATED W/ 3.5' FREEBOARD.
- ABSENT ALL FLASHBOARDS, THE SPILLWAY WILL PASS:
==> Q100 = 150 CFS @ 1.0' FREEBOARD
==> Q500 = 260 CFS @ 0.1' FREEBOARD.

SCANNED
AUG 29 2023