

Grimm, Angie

From: Grimm, Angie
Sent: Thursday, April 23, 2020 12:00 PM
To: erick.powell@brockwayeng.com; zach.latham@brockwayeng.com
Cc: Nelson, Dan; Keen, Shelley
Subject: 37-22769 Draft License and Recommendation Memo for Review
Attachments: 37-22769_LicenseRecommendatioMemo_Final.pdf; 37-22769_WaterRightLicense_Draft.docx.pdf; 37-22769_WaterRightLicense_Draft_Map.pdf

Erick and Zach,

Good morning! During our April 2, 2020 conference call, I committed to preparing a memorandum along with a draft license for Permit No. 37-22769 for your review prior to issuing a license. Attached are those documents. Please let me know if you have any questions regarding the memorandum or the draft license.

I would like to move forward with this license as soon as possible, but I also want to honor your request to review these documents before a license is issued. If I do not hear a desire to move forward sooner from you or your client, I will wait until May 6, 2020 to issue this license. This opportunity to review the draft license in no way impacts the 14 day period the permit holder will have to file a petition for reconsideration once IDWR issues the license as a preliminary order.

Hope this email finds you both safe and healthy.

Regards,
Angie

Angela M. Grimm, P.G.
Water Rights Section Manager
IDWR - State Office
322 E Front St Ste 648
Boise, ID 83702-7371
(208) 287-4951 phone
(208) 287-6700 fax

From: Grimm, Angie
Sent: Wednesday, April 1, 2020 12:35 PM
To: erick.powell@brockwayeng.com
Cc: Keen, Shelley <Shelley.Keen@idwr.idaho.gov>; Nelson, Dan <Dan.Nelson@idwr.idaho.gov>
Subject: 37-22769 Documents for Conference Call Tomorrow

Erick,

Good afternoon. In advance of our conference call tomorrow morning, I wanted you to have all of the documents currently in the water right file that are not yet profiled/available online. Please let me know if you have any difficulties receiving these documents. I look forward to discussing the licensing of permit no. 37-22769 with you, Shelley, and Dan tomorrow morning. Hope this email finds you well.

Regards,
Angie

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State of Idaho
Department of Water Resources
Water Right License
Water Right No. 37-22769

Priority: May 03, 2012

Maximum Diversion Rate: 0.07 CFS

Maximum Diversion Volume: 50.7 AF

It is hereby certified that:

MICHAEL G FOX 1993 REVOCABLE TRUST 5379 OLD RANCH RD PARK CITY UT 84098-6320

has complied with the terms and conditions of the permit, issued pursuant to Application for Permit dated May 03, 2012, and has submitted Proof of Beneficial Use on October 31, 2019. An examination confirms water is diverted from:

Source : SPRING

Tributary: EAST FORK WOOD RIVER

<u>Beneficial Use</u>	<u>Period of Use</u>	<u>Rate of Diversion</u>	<u>Annual Volume</u>
WILDLIFE	01/01 to 12/31	0.07 CFS	48.8 AF
WILDLIFE STORAGE	01/01 to 12/31		1.9 AF
RECREATION	01/01 to 12/31	0.07 CFS	48.8 AF
RECREATION STORAGE	01/01 to 12/31		1.9 AF
AESTHETIC	01/01 to 12/31	0.07 CFS	48.8 AF
AESTHETIC STORAGE	01/01 to 12/31		1.9 AF
DIVERSION TO STORAGE	01/01 to 12/31	0.07 CFS	

Location of Point(s) of Diversion

SPRING SW¼ NW¼ SE¼, Sec. 29, Twp 04N, Rge 19E, B.M. BLAINE County

Place of Use: WILDLIFE, RECREATION, AESTHETIC, WILDLIFE STORAGE, RECREATION STORAGE, And AESTHETIC 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	
04N	19E	29											X						

Conditions of Approval

1. The two (2) ponds established by the storage of water under this right shall not exceed a total capacity of 1.5 acre-feet or a total surface area of 0.3 acre.
2. Right 37-22769 authorizes the storage of an annual total of 1.9 acre-feet, comprised of 1.5 acre-feet to be used for the initial filling or carryover storage of the ponds and 0.4 acre-feet for the replacement of losses due to evaporation.

State of Idaho
Department of Water Resources
Water Right License
Water Right No. 37-22769

3. To mitigate for the depletion of water resulting from the use of water under this right and to prevent injury to senior water right holders, the right holder shall cease diverting and using water as authorized by the following water rights for the purposes and amounts specified below. Moreover, the official record for the following water right will be changed to show that diversion and use of water is not authorized because the rights, or portion thereof, are being dedicated to mitigation by non-use. The mitigating right may also include a condition stating that the mitigation by non-use is for the benefit of this right.

Right No.	Use Changed to Mitigation by Non-Use	Mitigation Rate (cfs)	Mitigation Volume (AF)	Mitigation Acres
37-21386	Irrigation	0.01	0.4	0.3
37-21793	Irrigation	0.02	0.4	0.3

The land that will no longer be irrigated under this right is located within the NENW, Section 32, Township 4N, Range 19E, B.M.

If the specified mitigation right, or portion thereof, is sold, transferred, leased, used on any place of use, or is not deliverable due to a shortage of water or a priority call, then the amount of water authorized for diversion under this right approval shall be reduced by the same proportion as the reduction to the mitigation rights.

4. If the pond is depleted for maintenance or other reason the right holder shall seek a separate authorization, such as a Water Supply Bank rental, to re-fill the pond.
5. Use of water under this right may 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. 37.
6. The right holder shall maintain a measuring device and lockable controlling works of a type approved by the Department in a manner that will provide the watermaster suitable control of the diversion(s).
7. Noncompliance with any condition of this right, including the requirement for mitigation, is cause for the director to issue a notice of violation, cancel or revoke the right, or, if the right is included in a water district, request that the watermaster curtail diversion and use of water.
8. This right is for the use of trust water, and it is subject to review 20 years after its initial approval (date of permit approval) to re-evaluate the availability of trust water for the authorized use and to re-evaluate the public interest criteria for reallocating trust water.
9. Administration of this right to satisfy the minimum stream flow water rights in the Snake River at Murphy Gage shall not be required because use of water pursuant to this right is either non-consumptive or the right holder is required to provide ongoing mitigation to offset the depletion of water resulting from the use of this right.

State of Idaho
Department of Water Resources
Water Right License
Water Right No. 37-22769

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.

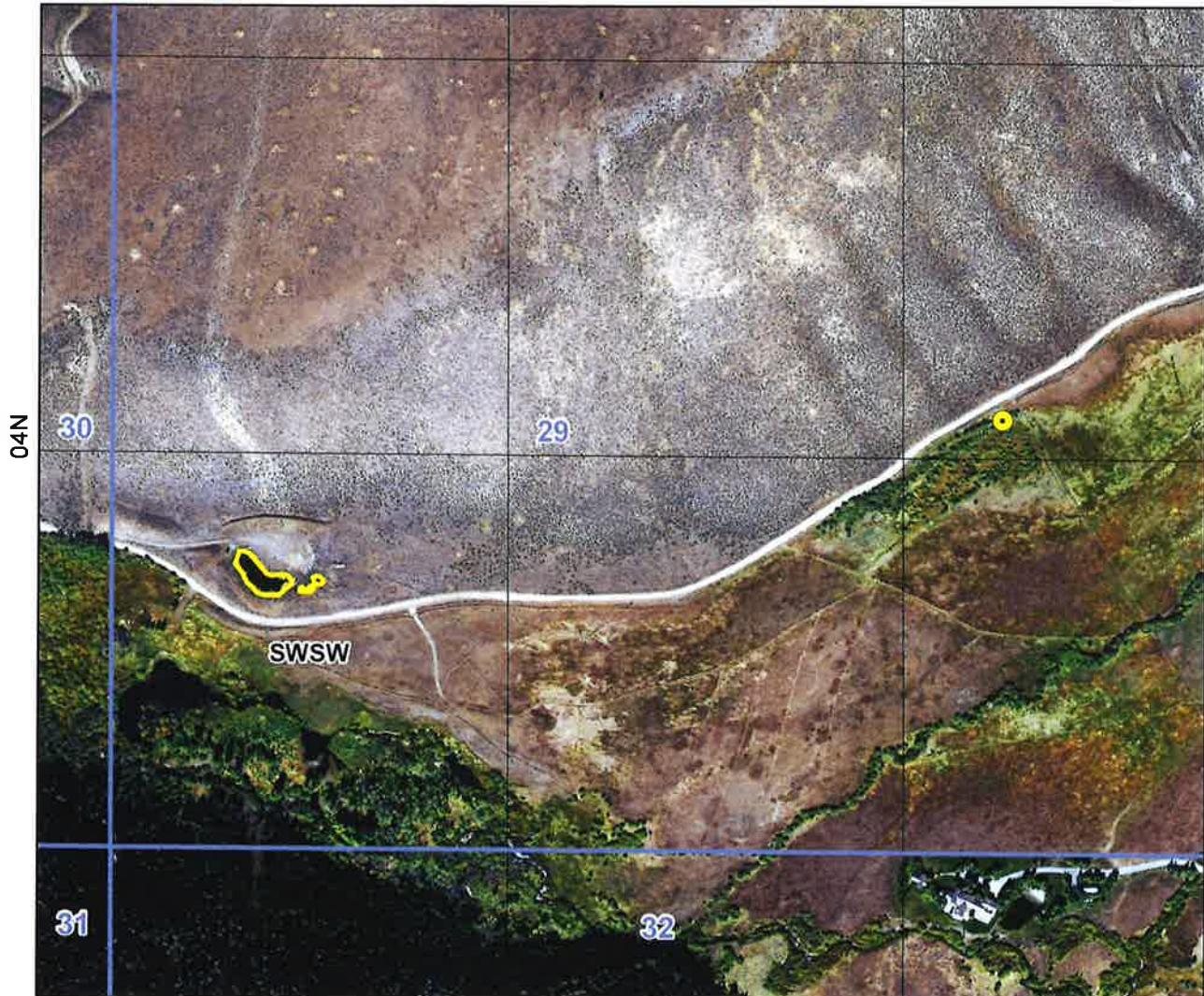
Signed this _____ day of _____, 20_____.






ANGELA GRIMM
Water Rights Section Manager

State of Idaho
Department of Water Resources
Attachment to Water Right License
37-22769

This map depicts the WILDLIFE STORAGE, RECREATION STORAGE, AESTHETIC STORAGE, WILDLIFE, RECREATION, AND AESTHETIC 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.

19E



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

0 0.075 0.15 0.3 Miles



MEMORANDUM

To: Water Right File No. 37-22769

From: Angela Grimm

Date: April 23, 2020

Re: Irrigation Beneficial Use License Recommendation

Background

On October 31, 2019, the Idaho Department of Water Resources ("IDWR") received a beneficial use field report ("Exam") from certified water right examiner Erick Powell of Brockway Engineering PLLC ("Examiner") for water right permit no. 37-22769 ("Permit"). When the Exam was submitted, the owner of the Permit was Robbins Trust & O'Connor Trust ("Permit Holder"). The Exam includes recommendations for several beneficial uses resulting from the diversion of the natural spring into two ponds. Along with the beneficial uses in the ponds, the Examiner recommends a direct flow irrigation beneficial use of 0.07 cfs for irrigation of 3.9 acres of land surrounding the ponds. The Permit did not authorize, nor did the Examiner recommend, irrigation storage and irrigation from storage uses.

Per the Examiner, the system diverts water from a natural spring via a six-inch pipe to a lined pond. Water flows from this pond into a second lined pond. There is a Seametrics inline magnetic meter installed on this pipe before the water enters the ponds. The Examiner indicates this is a six-inch meter in paragraph two of his narrative, but states it is a four-inch meter in paragraph seven of his narrative. The Examiner observed a flow rate of 32 gpm (0.07 cfs) on May 17, 2018, which is the basis for the rate recommendation. Irrigation water is pumped from the lower pond into a two-inch pipe to a pressurized irrigation system to irrigate 3.9 acres. The Exam includes photos of the pressurized irrigation system sprinklers operating. The irrigation pump has an independent power meter, per the Examiner's January 23, 2020 email. The Examiner stated water flows year round from the spring into the ponds. The two ponds cover a surface area of 0.34 acres with a total capacity of 1.5 acre-feet. The annual evaporative loss from the ponds is about 0.4 acre-feet of water. The Examiner did not include a volume recommendation for seepage losses, because the two ponds are lined.

The Permit's irrigation use development period consisted of the 2013 through 2019 irrigation seasons. The Examiner stated irrigation occurred in 2016. In his Exam narrative, he states Brockway engineering staff made multiple site visits to the place of use property from 2016 through 2019. The Exam contains 2015 and 2017 aerial imagery, but no specific mention whether irrigation occurred in those years or any years other than 2016.

Data Evaluation

Dan Nelson of IDWR prepared two memorandums evaluating various data sources to confirm irrigation beneficial use for the Permit. In his December 23, 2019 memorandum, Dan concludes an irrigation beneficial use should not be licensed for the Permit based on his analysis of 2015 and 2017 imagery (aerial, Sentinel, and Landsat) and information the Examiner submitted. This analysis assumes irrigation did not occur in 2015 or 2017. Dan also notes in his December 23, 2019 memorandum that during a November 22, 2019 phone conversation with the Examiner, IDWR asked the examiner for additional information regarding the irrigation frequency and the specific plant growth that occurred as a direct result of the irrigation system operation. IDWR had not received a response to its request before Dan wrote his December 23, 2019 memorandum.

On January 23, 2020, the Examiner emailed IDWR power use records from the motor and pump that divert water from the lower pond to the pressurized irrigation system. On January 24, 2020, Dan Nelson wrote an additional memorandum evaluating the power use records along with Metric ET data for 2015, 2016, and 2017. The Metric ET data analysis is unreliable due to the limited area of irrigation authorized by the Permit. Dan performed a power consumption coefficient calculation ("PCC Calculation") with the power use data. From the PCC Calculation, Dan concluded the Permit Holder diverted one acre-foot of water through the irrigation system during the months of May through October of 2016.

No documents on file for the Permit describe the vegetation grown by the Permit Holder on the irrigation place of use during the authorized development period for the Permit. In a November 15, 2019 email, the Examiner states the 2016 Metric ET data for the 3.9 acre Permit place of use "...more adequately reflects low maintenance pasture (which is irrigated) rather than sagebrush". This might imply the Permit holder applied water to low maintenance pasture rather than native vegetation, but the Examiner or Permit Holder have not confirmed this. Photos in the Exam show snow covered mountains in the background and sprinklers watering land that is bare in spots. The rest appears to be a mixture of small sagebrush and possibly minimal amounts of grass. The scale of the photographs make it difficult to discern what is growing underneath the sprinklers.

Applicable Statutes, Rules, and Administrative Criteria

IDWR has a responsibility to issue a license for all beneficial use developed in accordance with the Permit. Idaho Code § 42-219 states the license "... in no case shall be an amount in excess of the amount that has been beneficially applied."

Beneficial Use Examination Rule 35.01.j (IDAPA 37.03.02.035.01.j) states the examiner shall report an annual diversion volume for each developed use. However, Beneficial Use Examination Rule 035.01.j.viii (IDAPA 37.03.02.035.01.j.viii) exempts "irrigation using natural stream flow diverted from a stream or spring" from the volume reporting requirement.

Analysis

The Examiner confirmed the Permit Holder diverted water from a natural spring through two ponds and into a pressurized irrigation system at the place of use. Based on currently available information, the Permit Holder diverted a maximum volume of one acre-foot (af) of water into the irrigation system during the 2016 irrigation season per the PCC Calculation. Neither the Examiner nor the Permit Holder submitted evidence confirming diversion through the irrigation system any other year during the development period.

While there is evidence to support diversion of water through an irrigation system, the question of what benefit that diversion served has not been answered. The Examiner has implied low maintenance pasture grass may be the vegetation grown. The Ketchum RS station annual precipitation deficit value for low maintenance pasture grass is 1.4 af per acre (<http://data.kimberly.uidaho.edu/ETIdaho/stcvrstats.py?station=65&cover=16&stats=Deficit> with monthly value considered zero if precipitation exceeds evapotranspiration in that month). One af a year of water is not enough to successfully maintain 3.9 acres of low maintenance pasture grass. In fact, 5.5 af (1.4 af per acre on 3.9 acres) per year would be required if the irrigation system were 100% efficient. While more than five times as much water would be required for full irrigation of low maintenance pasture grass in this area, this fact alone does not preclude the Permit Holder from attempting to grow pasture grass to some extent. However, if pasture was the purpose for watering the Permit place of use, the Examiner submitted no evidence of what animals, if any, were grazing at the place of use. Neither the Examiner nor the Permit Holder submitted any evidence to explain what benefit was gained by diverting one af of water through the pressurized irrigation system and applying that water to ground within the Permit place of use.

Idaho Code § 42-219 establishes that beneficial use is the standard for licensing of water rights. It is only after IDWR determines the beneficial use developed that IDWR should consider whether that use also complied with the permit conditions. In this case, there is a lack of evidence to support licensing an irrigation beneficial use. Absent this information, regardless of compliance with the mitigation requirement set forth in the permit conditions, I recommend the license be issued without an irrigation beneficial use.

- (1) If IDWR were to include an irrigation beneficial use on the license, including a 1.0 af volume limit on the water right for the irrigation beneficial use would most accurately reflect the volume of water diverted and beneficially used during the development period. Including a volume on the license would comply with Idaho Code § 42-219 by issuing the license for no more than was beneficially used. However, considering the lack of evidence of benefit gained from applying water to the ground through the pressurized irrigation system, I do not believe IDWR should include irrigation as beneficial use at all on the license.

The Permit place of use is within the Eastern Snake River Plain Moratorium area, where new consumptive uses, such as irrigation, are not permitted for development unless they are mitigated. The consumptive use of water authorized by the Permit was mitigated by drying up a total of 5.3 acres of irrigation occurring under water rights 37-21386 (1913 priority) and 37-

21793 (1884 priority); 4.2 acres every year for the annual consumptive use of water for irrigation of 3.9 acres and the ponds' evaporative losses plus an additional 1.1 acres during the year of the ponds' initial fill. The Examiner confirmed the 5.3 acres identified for mitigation the year of the ponds' initial fill were not irrigated. Also, the Examiner confirmed the 4.2 acres identified for mitigation (every year after the ponds' initial fill) are no longer being irrigated.

The Permit Holder dried up 1.1 acres in addition to the 4.2 acres during the year of the ponds' initial fill, complying with Permit condition no. 7. On the license, IDWR should modify this condition to require a separate water right authorization, such as a Water Supply Bank rental, should additional water be needed to maintain the pond beyond the evaporative losses already mitigated.

I recommend the Permit be licensed without an irrigation beneficial use. A 0.3 acre portion of the mitigation offsets the annual 0.4 af of evaporative losses associated with the ponds. Accordingly, standard condition number 170 (Permit condition no. 4) will need to be modified when carried forward to licensing. Inclusion of this condition on the license order will serve two purposes;

- (1) it will update the mitigation terminology to current IDWR standards, from "mitigation" to "mitigation by non-use", and
- (2) it will revert the 3.9 acres (remaining portion of the 4.2 acres originally dedicated to mitigation not being used or mitigation purposes) back to irrigation.

The non-irrigation of 4.2 acres of land in recent years was done so in accordance with Permit condition no. 4. Although drying up of only 0.3 acres was used to mitigate the 0.4 af of evaporative losses associated with the ponds, the defense to forfeiture stated in Idaho Code § 42-223(10) applies to the remaining 3.9 acres under these circumstances. Upon issuance of a water right license for 37-22769, the acres reverted from mitigation back to irrigation may once again be irrigated in accordance with rights 37-21386 and 37-21793. Alternatively, the acres may be dedicated to mitigation by non-use within a new permit application and associated mitigation plan should the land owner desire to develop an irrigation beneficial use in the future.

Recommendation

IDWR should issue a license for the Permit without an irrigation beneficial use. IDWR should modify Permit condition no. 4 to state the following on the license:

To mitigate for the depletion of water resulting from the use of water under this right and to prevent injury to senior water right holders, the right holder shall cease diverting and using water as authorized by the following water rights for the purposes and amounts specified below. Moreover, the official record for the following water right will be changed to show that diversion and use of water is not authorized because the rights, or portion thereof, are being dedicated to mitigation by non-use. The mitigating right may

also include a condition stating that the mitigation by non-use is for the benefit of this right.

Right No.	Use Changed to Mitigation by Non-Use	Mitigation Rate (cfs)	Mitigation Volume (AF)	Mitigation Acres
37-21386	Irrigation	0.01	0.4	0.3
37-21793	Irrigation	0.02	0.4	0.3

The land that will no longer be irrigated under this right is located within the NENW, Section 32, Township 4N, Range 19E, B.M.

If the specified mitigation right, or portion thereof, is sold, transferred, leased, used on any place of use, or is not deliverable due to a shortage of water or a priority call, then the amount of water authorized for diversion under this right approval shall be reduced by the same proportion as the reduction to the mitigation rights.

Additionally, IDWR should modify Permit condition no. 7 to state the following on the license:

If the pond is depleted for maintenance or other reason the right holder shall seek a separate authorization, such as a Water Supply Bank rental, to re-fill the pond.