

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
IN-OFFICE REVIEW/BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATIONPermit No: 96-9722Exam Date: 3/19/2020

1. Does this qualify for an in-office field exam (IDAPA 37.03.02.035.01.r)? X Y N
- a. Irrigation of 5 acres or less
 - b. Storage of up to 14.6 AF for stockwater purposes only
 - c. Any use other than irrigation or storage, if the combined diversion rate is 0.24 cfs or less
 - d. Other < >

2. Current Owner: Name: Alfred Bill and Sharon Downing
Owner of Record Correct? X Y N
Address of Record Correct? Y N
If No: Address

The Department's tax parcel data shows the property is in the ownership of Bill and Sharon Downing.

3. Beneficial Use Fees have been paid: X Y N Receipt No: N035961

4. SOURCE TRIBUTARY

Pend Oreille River

Columbia River

Method of Determination: GIS and Tax Parcel DataChange in Source: Y X N**B. OVERLAP REVIEW**

1. Other water rights with the same place of use: NO Overlap

Water Right No.	Source	Purpose of Use	Basis

Comments: Water right 96-7816 is shown in this 40 acre tract. 96-7816 is owned by Eugene and Pearl Morse. A review of warranty deeds in this area do not show any of the lots on the north side of the river owned by Eugene and Pearl Morse. I checked the address given on the water right, and found that Morse did own the property at water right address of 2255 Gypsy Bay Road. The property owned by Morse is located on the south side of the river. A review of the warranty deeds for the Gypsy Bay Road property, shows that the Morses owned the property until 2000, and that Pearl Morse past way around that same time. It is my assumption that water right 96-7916 was described incorrectly in the field report and the water right license for water right 96-7816. Therefore, I do not believe that water right 96-7816 is an actual overlapping water for this 40 acre subdivision. There are a couple of other rights in this same government lot, but they are clearly marked on other properties.

2. Other water rights with the same point of diversion: NO Overlap

Water Right No.	Source	Purpose of Use	Basis

Comments: There are no other rights that are diverted from the river pump described in this permit.

C. DIVERSION AND DELIVERY SYSTEM**1. LOCATION OF POINT(S) OF DIVERSION:**

Source	Govt. Lot	¼	¼	¼	Sec.	Twp.	Rge.		County
River Diversion	1		SE	SE	26	57N	3W	B.M.	BONNER
								B.M.	
								B.M.	

Method of Determination: GIS and Tax Lot data.Change in POD? X N Amendment Required? X N**2. PLACE OF USE:** 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	
57N	3W	36												0.4				0.4	0.4
		Lot #												1				1	
Total Acres =																			0.4

Method of Determination: GIS and Tax Lot DataChange in POU? X N Amendment Required? X N Delivery System Diagram Attached (required). Indicate all major components and distances between components.

Indicate weir size/pipe as applicable.

 X Aerial Photo Attached (required for irrigation of 10+ acres). Photo of Diversion and System Attached

4. Well or Diversion Identification No.*	Motor Make	Hp	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size
Lake Pump	Unknown	2			

*Code to correspond with No. on map and aerial photo

Please Note: The application for permit states that the pump is a 2 Hp pump. There is no other information that states the type or manufacturer of the pump being used.

D. FLOW MEASUREMENTS

1.Measurement Equipment	Type	Make	Model No.	Serial No.	Size	Calib. Date
NONE						

2. Measurements: No measurement is required for an in-house exam.

E. FLOW CALCULATIONS

YES Additional Computation Sheets

Attached

Measured Method:

The application for permit does supply the horsepower of the pump, and using the contours for this area and a standard pressure of 50 psi, I was able to estimate the diversion rate. I also calculated the standard for irrigation for less than 5 acres use set forth by Administrative Processing Memo #17.

Theoretical Calculation = $(8.8 \times 2 \times 0.7) / (40 \times [50 \times 2.31]) = 0.79 \text{ cfs}$

Administrative Memo #17 = $0.4 \text{ acres} \times 0.03 \text{ cfs/acre} = 0.012 \text{ cfs rounded to } 0.01 \text{ cfs}$

Permit allowed = 0.02 cfs

I am recommending 0.02 cfs since the permit was approved at a rate higher than the standard 0.03 cfs per acre. It would be unjust to require such a reduction of the diversion rate for this type of system when it was approved by in the permitting process. It also appears from the theoretical calculation that the system was developed on the higher rate per acre authorization.

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 0.4 \times 3 \text{ af/ac} = 1.2 \text{ af}$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.02 \times 246 \text{ days} \times 1.9835 = 9.858 \text{ af}$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 1.2 \text{ af}$$

2. Volume Calculations for Other Uses:

G. PURPOSE OF USE

Irrigation X Y N # Stock Domestic # of Homes

Other: < >

Change in Purpose of Use? Y N

Method of Determination: Taxlot data and conversations with owner.

If Yes: From Use To Use Amount CFS AFA

H. NARRATIVE/REMARKS/COMMENTS

This permit qualifies for an in-house examination. There are no overlapping domestic water rights for the in-house use for this permit, so I am assuming that the permit holder is using the domestic exemption provided by Idaho Code § 42-227 and § 42-111 that authorizes in-house use and up to ½ acre of yard irrigation not to exceed 13,000 gpd. However, condition X31 should address any issues with overlapping water right.

The permit required a fish screen, and the permit holder stated on the proof of beneficial use form that they had installed the fish screen.

Conditions 004, and X15 will be carried forward to licensing. Condition R66 will be replaced with condition X31 limiting the diversion rate to 0.02 cfs and volume to 1.2 af. I do have a concern that this permit is upstream of minimum stream flow right 96-8730. No conditions were placed on the permit, and minimum streamflow conditions have only been placed on 2 of the 174 rights with a source of Pend Oreille River of Lake Pend Oreille. Since no conditions were placed on the permit, it was determined that it would create an additional burden to place this condition on the license.

Have conditions of permit approval been met? ☒ Yes ☐ No

I. RECOMMENDATIONS

1. Recommended Amounts

BENEFICIAL USE	PERIOD OF USE	DIVERSION RATE	ANNUAL VOLUME
Irrigation	04/01 to 10/31	0.02 CFS	1.2 AFA *
Totals:		0.02 CFS	1.2 AFA *

Please Note: This is a surface water right, so no volume will be included on the water right license.

2. Recommended Amendments

☐ Change P.D. as reflected above ☐ Add P.D. as reflected above ☒ None

☐ Change P.U. as reflected above ☐ Add P.U. as reflected above ☒ None

Other: < >

J. AUTHENTICATION – DANIEL A. NELSON – WATER RIGHT ANALYST 3

Field Examiner's Name _____ Date _____

Reviewer Angela M. Gunn Date 4/2/2020

* VOLUME NOT REQUIRED FOR IRRIGATION USE FROM A NATURAL STREAM OR SPRING PER IDAPA 37.03.02.035.01.j.viii.

Field Exam Map:

The yellow border shows the parcel for this permit and the yellow dot shows the point of diversion. The imagery on the left is 2019 NAIP imagery, and the image on the right is 2017 NAIP Imagery.

