

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

A. GENERAL INFORMATIONPermit No: 96-9862

Exam Date: 6/13/2022

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: Joseph G. and Mae L. Lapham
Owner of Record Correct? X Y N
Address of Record Correct? 0.9Y N
If No: Address

The Department's parcel data shows Joseph G. and Mae L. Lapham as the owners of the tax parcel associated with this permit.

3. Beneficial Use Fees have been paid: X Y N Receipt No: N039588

4. **SOURCE** **TRIBUTARY**
Lake Pend Oreille Pend Oreille River
Method of Determination: GIS and Tax Parcel Data
Change 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
96-8953	Lake Pend Oreille	Municipal	License
96-7011	Lake Pend Oreille	Domestic	License

Comments: This property is within the borders of the Oden Water Association Inc. service area. It is assumed that the in-house use is supplied by Oden Water Association Inc. The next-door neighbor shares a dock with the permit holder and has water right 96-9479 for domestic use on their property. This is a separate pumping system and 96-9479 doesn't interconnect with the permit holders' system. The permit holders' pump system in on the other side of the dock.

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

Water Right No.	Source	Purpose of Use	Basis

Comments: This property is within the borders of the Oden Water Association Inc. service area. It is assumed that the in-house use is supplied by Oden Water Association Inc. The next-door neighbor shares a dock with the permit holder and has water right 96-9479 for domestic use on their property. This is a separate pumping system and 96-9479 doesn't interconnect with the permit holders' system. The permit holders' pump system in on the other side of the dock.

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

Source	Govt. Lot	¼	¼	¼	Sec.	Twp.	Rge.		County
Lake Pend Oreille Pump	3		NE	SE	8	57N	1W	B.M.	Bonner
								B.M.	
								B.M.	

Method of Determination: GIS and Tax Parcel DataChange in POD? X N Amendment Required? X N**2. PLACE OF USE:** Use: Domestic and stockwater

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	1W	8									0.3								0.3
		Lot #									3								
Total Acres =																			0.3

Method of Determination: GIS and Tax Parcel 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
Well Pump	Unknown	2			

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

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** Additional Computation Sheets Attached

Measured Method:

The application for permit states that a 2 Hp pump serving 74 sprinkler heads and 8 frost free spigots would be used for this system. According to contour lines, there is a 40-foot elevation difference between the water level and the property. The 20-foot lift and a standard 50 psi pressure was used to estimate the system capacity. I also used Processing Administrative Memorandum #17 to determine Department standards for irrigation.

$$\text{Theoretical} = (8.8 \times 2 \text{ Hp} \times 0.70) / [40 \text{ ft} + (50 \times 2.31)] = 0.08 \text{ cfs (36 gpm)}$$

$$\text{Processing Administrative Memorandum \#17} = 0.3 \text{ acres} \times 0.03 \text{ cfs} = 0.009 \text{ cfs (4 gpm)}$$

$$\text{Permit allowed} = 0.02 \text{ cfs}$$

Since the system was developed well above the 0.02 cfs amount and uses a sprinkler system, reducing the diversion rate below the amount requested in the permit would cause undue issues to the permit holder. A diversion rate of 4 gpm would not be adequate to operate a sprinkler system. Most sprinkler system are developed to operate at 12 gpm (0.027cfs) per zone. I recommend that this permit be licensed for 0.02 cfs as authorized by the permit.

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 0.3 \text{ acres} \times 3.0 \text{ acre-feet/acre} = 0.9 \text{ acre-feet}$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.02 \text{ cfs} \times 214 \text{ days} \times 1.9835 = 8.5 \text{ acre-feet}$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 0.9 \text{ acre-feet}$$

2. Volume Calculations for Other Uses:

N/A

G. PURPOSE OF USEIrrigation ☒ Y ☐ N # Stock _____ Domestic # of Homes 1

Other: < >

Change in Purpose of Use? ☐ Y ☐ NMethod 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. This permit authorized 0.5 acres of irrigation from Lake Pend Oreille. The tax parcel associated with this permit is a 0.6 acre parcel. With the home and the driveway, only 0.3 acres have been irrigated. It appears if the system was built slightly larger than the permit authorized. It does seem reasonable to allow a full 0.02 cfs for this permit to adequately supply water to the sprinkler system.

The permit requires a fish screen, and the Statement of Completion for Submitting Beneficial Use form confirms the fish screen was installed.

Conditions 004, X15, and X66 should be carried forward to licensing. Condition R66 should be changed to condition X31 to show actual diversion rates and volumes. No further conditions are required for the licensing of this permit.

Have conditions of permit approval been met? ☒ X Yes ☐ No**I. RECOMMENDATIONS**

1. Recommended Amounts

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>DIVERSION RATE</u>	<u>ANNUAL VOLUME</u>
Irrigation	04/01 to 10/31	0.02 CFS	0.9 AFA
<u>Totals:</u>		0.02 CFS	0.9 AFA

2. Recommended Amendments

___ Change P.D. as reflected above ___ Add P.D. as reflected above X None

___ Change P.U. as reflected above ___ Add P.U. as reflected above X None

Other: < >

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

Field Examiner's Name



Date

6-13-2022

Reviewer



Date

6/13/22

Field Exam Map:

The yellow border shows the irrigation place of use and the yellow point shows the point of diversion. The parcel boundaries are shown in green.

