

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

A. GENERAL INFORMATION

Permit No: 94-7831

Exam Date: 3/19/2014

1. Does this qualify for an in-office field exam (IDAPA 035.02.r)? ☒ Yes ☐ No
- Irrigation of 5 acres or less
 - Storage of up to 14.6 AF for stockwater purposes only
 - Any use other than irrigation or storage, if the combined diversion rate is 0.24 cfs or less
 - Other < >

2. Current Owner: Name: Arney & Amy Wick
Owner of Record Correct? ☒ Yes ☐ No
Address of Record Correct? ☒ Yes ☐ No
If No: Address

3. Beneficial Use Fees have been paid: ☒ Yes ☐ No Receipt No: CO98241

4. SOURCE**TRIBUTARY**

Coeur d'Alene River

Coeur d'Alene Lake

Method of Determination: Applicant submitted an aerial photo map that outlined POD & POU.

Change in Source: ☐ Yes ☒ No**B. OVERLAP REVIEW**

1. Other water rights with the same place of use: Overlap? ☐ Yes ☒ No

Water Right No.	Source	Purpose of Use	Basis

Comments: There are no other water rights that share POU. 94-7170 is a wildlife storage that shows an overlap on IDWR's POU shapefile. But the POU is to the north side of Coeur d'Alene River.

2. Other water rights with the same point of diversion: Overlap? ☐ Yes ☒ No

Water Right No.	Source	Purpose of Use	Basis

Comments: There are no other water rights that share POD.

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

Source	Govt. Lot	¼	¼	¼	Sec.	Twp.	Rge.		County
Coeur d'Alene River	8		SE	NE	14	48N	02W		Kootenai
Coeur d'Alene River	8		SE	NE	14	48N	02W		Kootenai

Method of Determination: Legal Description in permit validated by PLS data and mapping.

Change in POD? ☐ Yes ☒ No

Amendment Required? ☐ Yes ☒ No

2. **PLACE OF USE:** Use: Domestic

TWP	RGE	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
48N	02W	14				X L8													
48N	02W	14													X L9				

Method of Determination: Map of property submitted by land owner identifies POU clearly. PLSS data through ArcMap match description.

Change in POU? ☐ Yes ☒ No Amendment Required? ☐ Yes ☒ No

☐ Delivery System Diagram Attached (required). Indicate all major components and distances between components.

Indicate weir size/pipe as applicable.

☒ 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
Coeur d'Alene River	Unk	1	Unk	Unk	Unk
Coeur d'Alene River	Unk	1	Unk	Unk	Unk

*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

2. Measurements: In-office field exam so theoretical not applicable.

E. FLOW CALCULATIONS

☒ Additional Computation Sheets Attached

Measured Method:

According to administrator memo #22, domestic use for 1 home is allowed a flow rate of 0.04 cfs

See the theoretical calculation sheet for a calculated measurement ranging a number of scenarios providing an average flow rate of 0.05 cfs per pump.

Measurement = 0.05 cfs x 2 pumps

Permit allowed = 0.04 cfs

License recommend for 0.04 cfs total.

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = \underline{\quad X 3.5 \quad} =$

$V = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = \underline{\quad X 214 X 1.9835 \quad} =$

$$V = \text{Smaller of } \underset{\text{I.R.}}{V} \text{ and } \underset{\text{D.R.}}{V} = \underline{\hspace{2cm}}$$

2. Volume Calculations for Other Uses:

Administrator's memo #22 recommends volume to 1.2 af in domestic use for in-house use and up to half acre of irrigation.

G. PURPOSE OF USE

Irrigation ☐ Yes ☒ No # Stock 0 Domestic # of Homes 1

Other: < >

Change in Purpose of Use? ☐ Yes ☒ No

Method of Determination: Beneficial use report submitted shows that use is for one home.

If Yes: From Use _____ To Use _____ Amount _____ CFS _____ AFA _____

H. NARRATIVE/REMARKS/COMMENTS

Permit 94-7831 authorized the use of 0.04 cfs from Coeur d'Alene River for domestic water purposes. Based on the information provided in the water right file, this qualifies for an in-office field exam.

The application stated that the domestic use was for one RV site. From the aerial photo of land provided in the application and recent aerial imagery, I was able to determine there is a home on the property. There are two points of diversion for the property. Contact with Ms. Wick was made to confirm this. She was under the impression that they were forced to use 2 pumps because the water right technically covers two separate properties. Both properties are owned by the Wick's and are direct neighbors to each other. This was probably described to her in case another home was built on the second property, they could then do a transfer for the second diversion.

Water right 94-7170 is wildlife storage water right owned by the State of Idaho north of the Coeur d'Alene River. No other water rights with possible overlap exist.

Theoretical calculations for flow were done to verify the ability to supply the requested water rate. I followed flow rate and volume suggestions from Administrators Memo #22. There were no issues or reasons that I found to request further information.

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

I. RECOMMENDATIONS**1. Recommended Amounts**

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>DIVERSION RATE</u>	<u>ANNUAL VOLUME</u>
Domestic	01/01-12/31	0.04	1.2
<u>Totals</u>		0.04 cfs	1.2 af

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

Field Examiner's Name

Patricia Wiley

Date

03/19/14

Reviewer

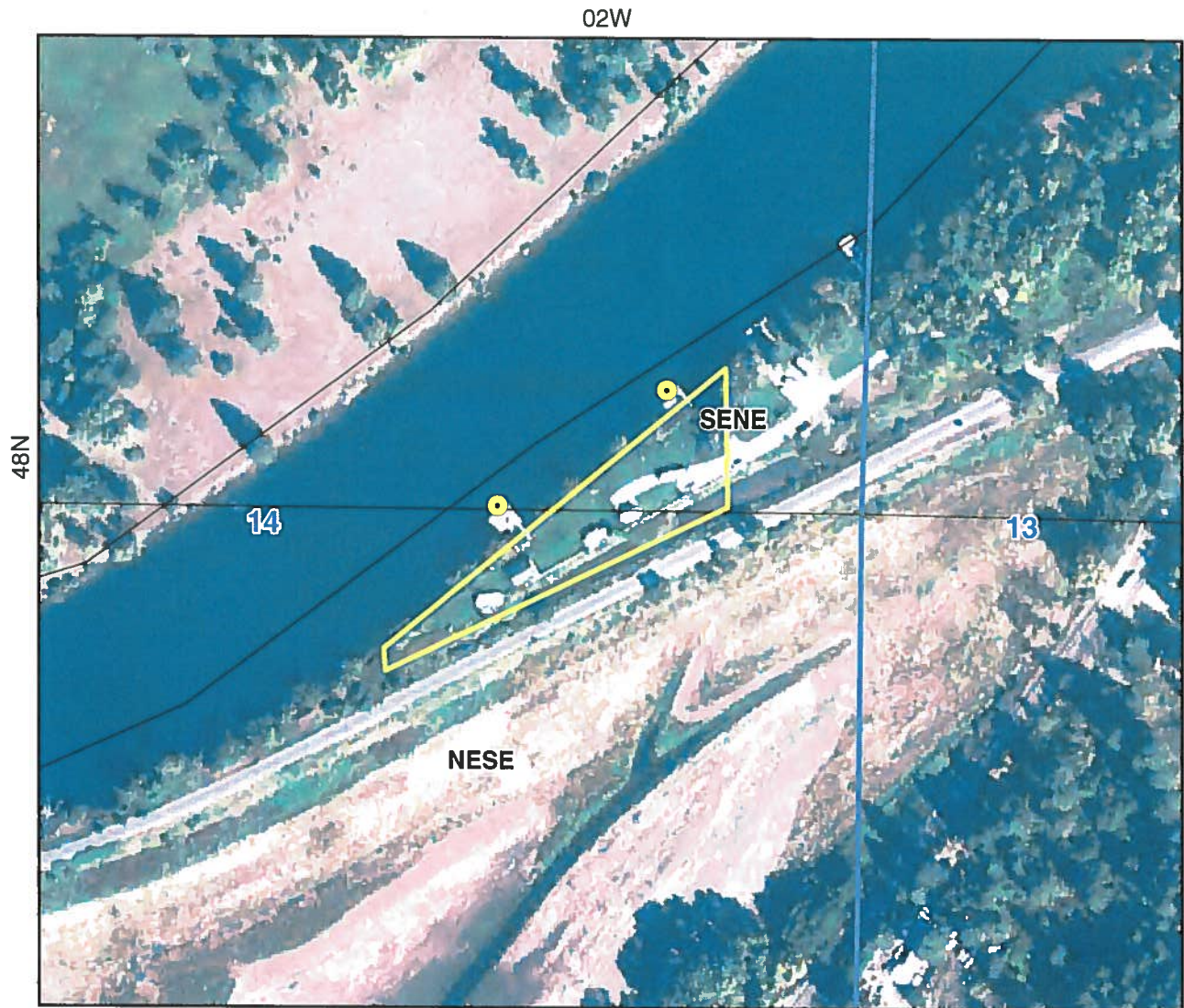
Daniel A. Wilson

Date

3-26-14

State of Idaho
Department of Water Resources
Field Exam Map
94-7831

This map depicts the DOMESTIC 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
-  Quarter Quarters

0 0.03 0.06 0.12 Miles



THEORETICAL HORSEPOWER EQUATION WORKSHEET (cjh 1/92)

Water Right No.: 94-7831
 Reviewer: Patrick Kelly
 Date of Review: 3/19/2014

P/D No.:	Senerio 1	Senerio 2	Senerio 3
PUMP HORSEPOWER	1	1	1
BOOSTER HORSEPOWER	0	0	0
PUMPING LEVEL	15	15	15
DISCHARGE PRESSURE	40	50	60
RATE OF FLOW (cfs)	0.06	0.05	0.04 0.05

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:

Lift was taken from DRG topo map to measure the point of diversion to the place of use or storage tank. Used 40-60 pressure using standard turn on shut off limits for domestic pressure tanks. Average rate of flow is 0.05 cfs. There are two 1 hp pumps for this syste. This represents that the permitted 0.04cfs is capable of being supplied to the home.

Process	Basin Sequence	Draft	Owner	Source	POD/ POU	NENE	NWNE	SWNE	SENE	NENW	NWNW	SWNW	SENW	NESW	NWSW	SWSW	SESW	NESE	NWSE	SWSE	SESE	Total Acres
Water Right	94-7170	N	STATE OF IDAHO	SPRINGS, UNNAMED STREAM	POD	X			X													0
Water Right	94-7170	N	STATE OF IDAHO	SPRINGS, UNNAMED STREAM	POU	X			X													0
Water Right	94-7220	N	STATE OF IDAHO	KILLARNEY LAKE	POU					X	X	X	X	X	X	X						0
Water Permit	94-7413	N	SCHLEPP, BRENDA L; SCHLEPP, MICHAEL R	ROBINSON CREEK	POU				X					X		X	X	X	X	X	X	0
Water Permit	94-7831	N	WICK, AMY C; WICK, ARNEY	COEUR D ALENE RIVER	POD				X													0
Water Permit	94-7831	N	WICK, AMY C; WICK, ARNEY	COEUR D ALENE RIVER	POU				X									X				0