

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

A. GENERAL INFORMATION

Permit No: 96-9507

Exam Date: 2/4/2014

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: Marc & Janet Bocciardi
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: CO97840

4. **SOURCE** **TRIBUTARY**
Lake Pend Oreille Pend Oreille River
Method of Determination: Topographic and aerial map places property on lake.
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
96-2279	Lake Pend Oreille	Irrigation	License
96-4180, 96-7505, 96-7691, 96-7863	Lake Pend Oreille	Municipal	License & Claim

Comments: 96-4016 is an irrigation right not pertinent to the land. 96-2279 is an irrigation water right from 1963 that does overlap POU and will carry combined limits. 96-4180, 96-7505, 96-7691, 96-7863 are City of Sandpoint rights that the land owner uses for domestic water. Combined limits are identified with city water. Water right 96-8697, 96-9329 are for neighbors' yard to the west. 96-9521 is a water permit for a yard irrigation not in connection with the Bocciardi property.

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

Water Right No.	Source	Purpose of Use	Basis

Comments: Single submersible pump placed in lake. No second system exists.

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

Source	Govt. Lot	¼	¼	¼	Sec.	Twp.	Rge.		County
Pend Oreille Lake	1		NW	NW	7	57N	01W	B.M.	Bonner
								B.M.	
								B.M.	

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

Change in POD? ☐ Yes ☒ NoAmendment Required? ☐ Yes ☒ No2. **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	01W	7						0.5											0.5
		Lot #						1											
Total Acres =																			0.5

Method of Determination: Aerial photography shows yard area of 0.9 acres. Limiting license to 0.5.

Change in POU? ☐ Yes ☒ NoAmendment 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
Submersible Pump	Unk	1.5	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: This is an in-office field exam. Flow measurements are not applicable.**E. FLOW CALCULATIONS**☒ Additional Computation Sheets Attached

Measured Method:

Per App. Processing Memo #17, up to 0.03 cfs/acre for irrigation up to 5 acres acceptable. $0.5 \text{ acres} \times (0.03 \text{ cfs/acre}) = 0.02 \text{ cfs}$

See theoretical flow attachment that states system has an average capable flow rate of 0.17cfs.

Measurement = 0.17 cfs**Permit allowed = 0.04 cfs****License recommend for 0.02 cfs****F. VOLUME CALCULATIONS**

1. Volume Calculations for Irrigation:

Surface water for irrigation is generally not issued on water rights except when source is from a lake per the Beneficial Use

Examination Rules.

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 0.5 \times 3.0 = 1.5 \text{ af}$$

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

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 1.5 \text{ af}$$

2. Volume Calculations for Other Uses:

None.

G. PURPOSE OF USE

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

Other: < >

Change in Purpose of Use? ☐ Yes ☒ No

Method of Determination: Contact with the home owner and information presented in the water right file provides enough proof that use is as described in beneficial use report.

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

H. NARRATIVE/REMARKS/COMMENTS

Permit 96-9507 authorized the use of 0.04 cfs of surface water from Pend Oreille Lake for irrigation purposes. The beneficial use states that the water is used to irrigate half an acre of yard for a private home on the lake.

A letter was sent to the permit owners requesting proof of a fish screen installation. The land owner responded with a picture of a pump buried in rock and gravel on the shore. It is assumed that some sort of screen is on the end of the intake to avoid pulling rocks through the hose. There is also no direct contact with the intake of the pump and the open water.

There is overlap in POU associated with this water right. 96-2279 is an irrigation water right from 1963 that does overlap POU and will carry combined limits. Changes should have been recommended after the application was submitted. 96-4180, 96-7505, 96-7691, 96-7863 are City of Sandpoint rights that the land owner uses for domestic water. Combined limits are identified with city water. Condition X35 identified both overlaps have been added to the license.

The land owner applied for 0.04 cfs. The theoretical flow rate that was done shows that the 0.04 cfs is easily attainable in this system. However, per Administrator's Memo #17, the rate was limited to 0.02 cfs. Since the source is from Pend Oreille Lake, I have included the volume for this surface irrigation water right per the Beneficial Use Examination Rules.

Place of use was measured by aerial photography and ArcMap mapping tools. Area calculation of the yard initially showed that 0.9 acres of land available to irrigate exists on the lot. A conversation with Ms. Boccardi confirmed that the water used from the lake only services 0.5 acres at most, and that I may have included land on the property that is not actually used by the home owners.

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>
Irrigation	04/01-01/31	0.02 cfs	1.5 af
<u>Totals</u>		0.2 cfs	1.5 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 Miller Date 03/19/14

Reviewer Daniel A. Miller Date 3-26-14

State of Idaho
Department of Water Resources
Field Exam Map
96-9507

This map depicts the IRRIGATION 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.

01W



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

0 0.0075 0.015 0.03 Miles



THEORETICAL HORSEPOWER EQUATION WORKSHEET (cjh 1/92)

Water Right No.: 96-9507
 Reviewer: Patrick Kelly
 Date of Review: 3/13/2014

P/D No.:	Senerio 1	Senerio 2	Senerio 3
PUMP HORSEPOWER	1.5	1.5	1.5
BOOSTER HORSEPOWER	0	0	0
PUMPING LEVEL	20	20	20
DISCHARGE PRESSURE	10	15	20
RATE OF FLOW (cfs)	0.21	0.17	0.14 0.17

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:

Pumping level was taken from topographic maps. The DRG showed an elevation from the surface of the lake to yard at 20 feet. Open pump discharge pressure for this type of system is generally around 10 psi. Extreme case of 20 psi still shows the 0.04 cfs irrigation rate is theoretically possible to pump.

[illegible]

[illegible]

Kelly, Patrick

From: Kelly, Patrick
Sent: Wednesday, March 12, 2014 2:30 PM
To: 'Janet Bocciardi'
Subject: RE: 22 Crooked Ear Ct, Sandpoint, ID

Hello Janet,

Thank you for getting back to me. This will work for a screen. The intake was installed by covering the intake hose with rock. It is assumed that some sort of screen is on the end of the intake hose to avoid pulling rocks through the hose. There is no direct contact with the intake of the pump and the open water, so the condition appears to have been met. I will add this to your water right file and move forward with licensing.

Regards,

Patrick Kelly

Water Resource Agent
Idaho Department of Water Resources
322 E. Front St.
Boise, Idaho 83702
d: 208.287.4933
f: 208.287.6700
patrick.kelly@idwr.idaho.gov

From: Janet Bocciardi [<mailto:honeyfromthebee@gmail.com>]
Sent: Wednesday, March 12, 2014 1:40 PM
To: Kelly, Patrick
Subject: 22 Crooked Ear Ct, Sandpoint, ID

Hi Patrick -

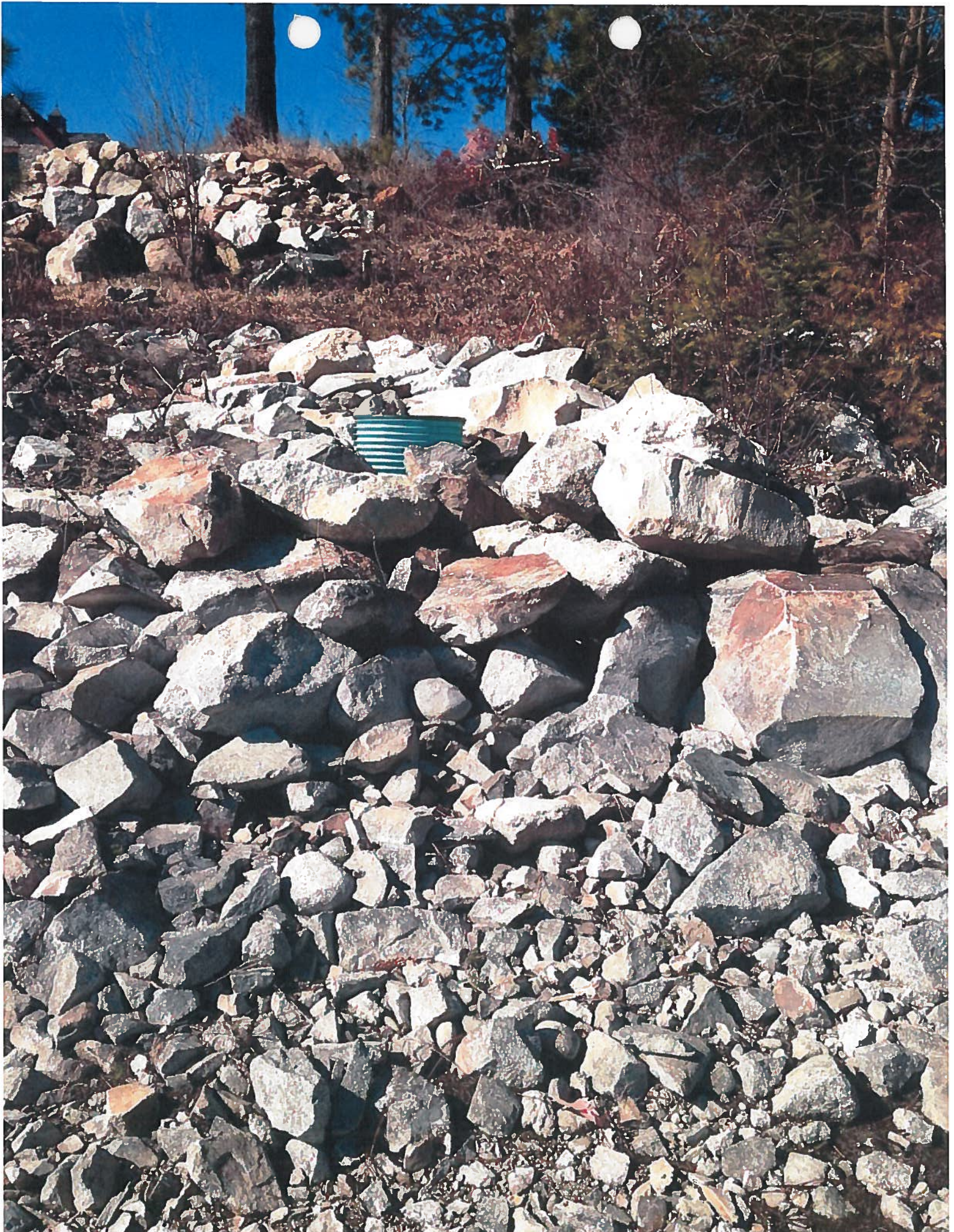
The snow finally melted so my neighbor was able to go over and look for the fish screen. After she sent photo I remembered the situation.

The fish screen and intake are underneath the riprap on the shore. The green thing is the pump. Our whole shoreline is riprapped by the Army Corp of Engineers so after installation the rocks had to be replaced. No lake bed excavation occurred.

The work that was done there was by a local pump company to the specs as defined. Would you want to contact them for a product list? Not sure what else can be provided at this point.

Let me know. Thanks.

Janet Bocciardi
22 Crooked Ear Ct
Sandpoint ID 83864



MEMORANDUM

TO: Water Right File 96-9507

FROM: Patrick Kelly – Water Resource Agent

DATE: February 6, 2014

SUBJECT: Request for information

Spoke with Janet Bocciardi today over the phone to discuss two issues. Shape files created using aerial photography of the property show an acreage of 0.9. The permit allows up to 0.5. Janet believes that the area may include riprap or shore that is not being irrigated by her and that she does not believe the area to be larger than the 0.5 acre.

Requested a photo of the fish screen and she said that she would get back to me. Pump may currently be buried by rock, snow or ice.