

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

A. GENERAL INFORMATIONExam Date: 01/25/2024

1. Does this qualify for an in-office field exam (IDAPA 37.03.02.035.01.r)? X Y ___ N
- a. X 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: **STEVE & MARIE STEBING**

Owner of Record Correct? ___ N

Address of Record Correct? ___ N

If No Explain: _____

3. Beneficial Use Fees have been paid: X Y ___ N Receipt No: N044113

4. Source: _____ Tributary: _____

PEND OREILLE RIVER**COLUMBIA RIVER**Method of Determination: GIS, Aerial Imagery, Taxlot data.Change in Source: ___ Y X N**B. OVERLAP REVIEW**1. Other water rights with the same place of use: X No Overlap

Water Right No.	Source	Purpose of Use	Basis
96-7816	PEND OREILLE RIVER	DOMESTIC	LICENSE

Comments: The permit place of use (POU) is overlapped by the place of use for right 96-7816; a domestic right with the same source as the permitted use. However, the permit and license have different beneficial uses, the right 96-7816 POU is the entire SESE of Gov lot 1, and there are no parcels withing the SESE listing the domestic right holder of 96-7816 as property owners. There are no concerns regarding any right overlapping the permit place of use (POU).

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

Water Right No.	Source	Purpose of Use	Basis
NONE	NA	NA	NA

Comments: There are no rights sharing the permit point of diversion (POD).

C. DIVERSION AND DELIVERY SYSTEM

1. Location of Point(s) of Diversion:

Source	Govt. Lot	¼	¼	¼	Sec.	Twp.	Rge.		County
Pend Oreille River			SE	SE	26	57N	03W	B.M.	BONNER

Method of Determination: GIS and Taxlot data.Change in POD? ___ Y X N Amendment Required? ___ Y X N2. Place of 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	03W	26															0.1	0.5	0.6
		Lot #															2	1	
Total Acres =																			0.6

Method of Determination: Bonner County Maps, GIS, and Taxlot data.

Change in POU? ☐ Y ☒ N Amendment Required? ☐ Y ☒ N☐ 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

3. Diversion Id No.*	Motor Make	HP	Pump Model	Pump Make	Pump Serial No. or Discharge Size
Screened inlet in River	Unknown	1/2	Unknown	Unknown.	Unknown

*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	NA	NA	NA	NA	NA	NA

2. Measurement Comments: The permit holder provided that the pump used is 1/2 Hp. A maximum head of about 20ft was estimated to the licensed POU using the DRG map.

E. FLOW CALCULATIONS☐ Additional Computation Sheets Attached

Measured Method:

A theoretical calculation and Administrative Memo #17 were used to determine a reasonable rate of diversion.

$$Q = (0.5\text{Hp})(8.8)(0.80 \text{ efficiency}) / (20 \text{ ft lift}) + (2.31) * (40 \text{ psi}) = 0.03\text{cfs}$$

Theoretical Calculation= 0.03cfs

Permit allowed = 0.03cfs

Recommendation= 0.02cfs

Comments:

The permit holder provided the pump horsepower (1/2 Hp) and stated that the irrigated area within the parcel are 1 acre on the proof of beneficial use. The irrigated areas, approximately 0.6-acre total were confirmed using GIS, Google Earth, and Bonner County GIS imagery. The system was described as a 1/2 Hp pump with an 1 1/4 " inlet with a foot valve. The pump has 2 hose bibs on it connected to garden hoses with 2 portable sprinklers used to water throughout the POU.

Approximately 0.03cfs is possible with the 1/2 Hp pump. According to Administrative memo #17 up to 0.03cfs per acre is standard for the irrigation of up to 5 acres. I am recommending a diversion rate of 0.02cfs for the license.

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = \underline{0.6\text{-acre} \times 3.0 \text{ AF} = 1.8\text{AF}}$$

I.R.

$$V = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = \underline{0.02\text{cfs} \times 214 \text{ days} \times 1.9835 = 8.5 \text{ AF}}$$

D.R.

$$V = \text{Smaller of } V_{\text{I.R.}} \text{ and } V_{\text{D.R.}} = \underline{1.8 \text{ AF}}$$

Comments:

This permit was issued for irrigation use from a natural stream/river source. According to the IDAPA Beneficial Use Examination Rules 37.03.02.35. 01j.viii a diversion volume is not required for irrigation if water is diverted from a natural flowing stream/river or spring. However, as the irrigated area is less than 1 acre, the annual volume of 1.8 AF will be stated on condition X31 of the license.

G. PURPOSE OF USEIrrigation X Y N # Stock NA Domestic # of Homes NA Change in Purpose of Use? Y X N Method of Determination: Bonner County Maps, GIS, and Taxlot Data**H. NARRATIVE/REMARKS/COMMENTS**

This permit for the irrigation of 1 acre qualifies for an in-office examination for license. The permit holder submitted the Proof of Beneficial Use, received by IDWR on October 10, 2023, stating in section #5 that the beneficial use was developed 1 acre of irrigation using a ½ Hp pump conveying water through hoses to 2 sprinklers used throughout the POU for watering. I was able to confirm approximately 0.6 acres irrigation was developed using aerial imagery (see figures 1 & 2). The permit holder also provided the encroachment permit from Idaho Department of Lands (for the parcel appurtenant to the permitted POU (RP57N03W269300A). I called the permit holder on January 25th, 2024, leaving a voicemail and emailed requesting additional information including a map of the irrigated area developed and a system diagram. The permit holder called back the following day and described the system as a ½ Hp electric pump (powered by extension cord) with 2 hose bibs on it conveying water through two garden hoses with portable sprinklers moved throughout the POU for watering. The entire system is removed seasonally. The permit holder also confirmed verbally that there is a foot valve with fish screen on the intake entering the lake at the dock, and that the irrigated area identified in the imagery I emailed him is correct. However, the permit holder clarified that there is an additional 3ft wide strip north of the driveway where he planted and grew a strip of grass. Steven Stebing (permit holder) agreed that the total area irrigated is approximately 0.6 acres.

After reviewing the permit holder's response to the additional information request, an area of approximately 0.6 acres was confirmed for irrigation. No evidence of irrigation was found in the northeast corner of the permit holder's parcel. A theoretical calculation confirmed that the pump can provide the 0.04cfs rate on the permit. However, as the place of use is approximately 0.6-acre in area I am recommending the license be issued with a reported irrigated area of 0.6 acres and a rate of 0.02cfs (as per Administrative Memos #17 and 6). As the diversion is from streamflow the volume was not reported on the license (IDAPA Rules 37.03.02.35. 01j.viii).

I am recommending the license be issued with a rate of 0.02cfs and conditions 227, 004 and X31. Condition R66 was replaced with condition X31 at licensing, as the irrigated area is less than 1 acre. Condition 029 was removed at licensing as the permit holder confirmed there is a foot valve installed at the intake. ~~As the permit POD is within the reach of MSF right 96-8730 for the Pond Oreille River, condition 227 was added at licensing, as per current guidance.~~ PH

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

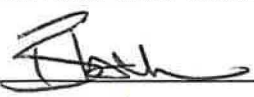
1. Recommended Amounts:

BENEFICIAL USE	PERIOD OF USE	DIVERSION RATE	ANNUAL VOLUME
IRRIGATION	04/01 TO 10/31	0.02CFS	
<u>Totals:</u>		0.02CFS	

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- Bob Howe- Water Resource AgentField Examiner's  Date 3/27/2024Reviewer  Date 3/28/24

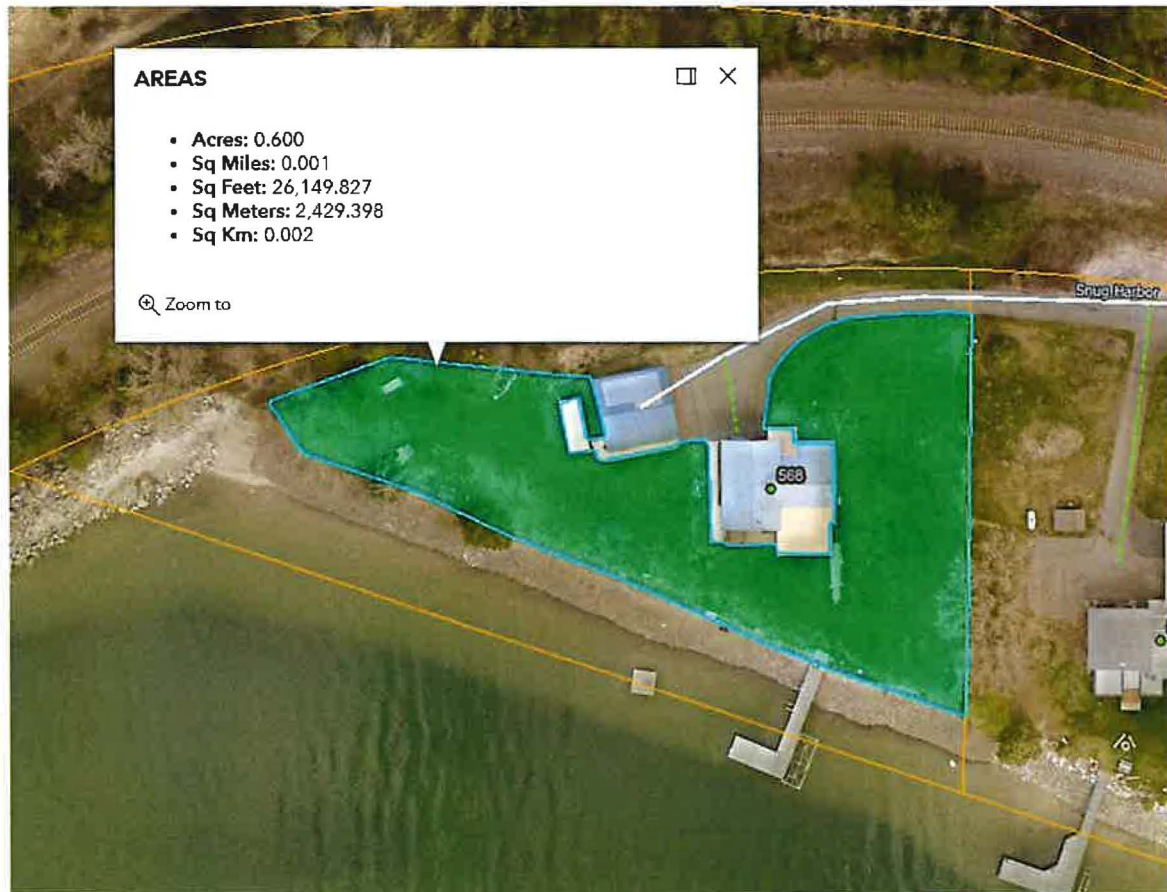


Figure 1- Bonner County GIS imagery measurement of the irrigation visible in the POU. After a conversation with the permit holder, a review of the area north of the driveway found evidence of irrigation in a 3ft wide strip along the driveway.



Figure 2- GIS 2021- Image of POU. Irrigated areas outlined in light blue. Blue point is the point of diversion.

Information Requested- Permit 96-12198

From: Howe, Bob (bob.howe@idwr.idaho.gov)

To: envirostebing@aol.com

Date: Thursday, January 25, 2024 at 09:41 AM PST

RECEIVED

FEB 05 2024

DEPT. OF WATER RESOURCES

Dear Steve & Marie Stebing,

The Department received the Proof of Beneficial Use you submitted for permit #96-12198. I am currently reviewing the permit eligibility for an in-office examination for licensing. In-office examination expedites the licensing process by using information and documentation submitted by the permit holder(s) and GIS aerial images to process the examination without the need for a field examination to be scheduled and conducted at a later time. The permit issued provided a scope for the development of future uses. The purpose of the examination is to record the details of the use that has been developed.

After reviewing your Proof of Beneficial Use, there are a few items in need of further information or clarification.

(1) The aerial imagery indicates approximately 0.6 acres of lawn is irrigated; other areas appear to be riparian (see attached Irrigable Area image). On section #3 of the Statement of Completion you stated that the extent of the irrigation use developed is 1.0 acres. Does our measurement cover the correct areas? Please review the attached GIS and Google Earth images. I also measured all the land above the highwater mark, not including sidewalks, the riparian area on the western edge of the property, structures and the driveway. The total measurement is approximately 0.7-acres. Please review the attached images, and acknowledge if you agree with this assessment. If not, please respond with a map outlining the irrigated area on aerial imagery. You may draw the area on one of the images attached, or use the Bonner County GIS map measuring tool and email back a screenshot identifying the irrigated area and where the 1 ¼' inlet (point of diversion) leaves the river.

(2) Please provide a sketch of the system diagram from the point of diversion to delivery for the irrigation occurring. Making sure to identify the **boundary of the area(s) irrigated, sprinklers, water lines** (including dia. and type, for example ½" poly pipe), the **pump** (including the Hp, make and model). This can be drawn on one of the images I have attached to this email, or you may use your own. This can be done on the same image requested in #1 or in a separate image (or drawing) of your choosing. Then attach the diagram to an email with any additional information regarding the system and/or that would be helpful in describing the system diagram.

Feel free to reach out to me with any questions or concerns regarding the items requested. If I am unavailable any of my team members should be able to assist you, if you provide your permit # 96-12198. It is important that you **respond to this request within 14 days** by email and/or phone, in order to pursue this method to expedite your licensing process.

Thank you for your time and attention in this matter.

Permit 9612198

2-1-2024

Steve and Marie Stebing
568 Snug Harbor
Sandpoint, ID 83864
envirostebing@aol.com

To Bob Howe,

I reviewed The aerial Imager and Confirm That
0.6 acres of Lawn Irrigation is Correct.

I wrote 1 acre on The application because I have
 $1\frac{1}{3}$ acre and did not want to under estimate on
water useage.

Pump. Brand - Red Lion

$\frac{1}{2}$ Horse Power

Model - C48D47 ± 01

Serial # - 07419J2

Pump has $1\frac{1}{4}$ " vinyl suction Hose with Screened
Foot Valve. Length 12 Feet.

Pump has Two Garden Hose Connections

Each Connection has 300 Ft. of hose That connects
Two Portable Sprinklers on Stands. Sprinklers are
Moved around The yard Manually.

No underground Installations.

Pump, Hoses, and Sprinklers Stored in Shop During
Winter.

Thank You, Steve Stebing

Steve Stebing

AREAS

96-12198

Steve Steking
SG8-Snug Harbor
Sandpoint, ID.
83864

- Acres: 0.600
- Sq Miles: 0.001
- Sq Feet: 26149.827
- Sq Meters: 2429.393
- Sq Km: 0.002

