

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 72-16811

Exam Date: 9/10/2012

1. Current Owner: ROBERT H BRYSON
HC 67 BOX 350
STANLEY ID 83278
(208)838-2344
2. Accompanied by: Jeff Cooper (IDWR) and Mr. and Mrs. Robert Bryson (Permit Holder)

3. SOURCE TRIBUTARY
SALMON RIVER SNAKE RIVER

B. OVERLAP REVIEW

1. Other water rights with the same place of use: None
2. Other water rights with the same point of diversion: None

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

SALMON RIVER NE1/4NE1/4SE1/4 Sec. 30, Twp 11N, Rge 16E, B.M.
CUSTER County

Method of Determination: Aerial photography and field verification

2. PLACE OF USE: IRRIGATION

Twp	Rge	Sec	NE				NW				SW				SE				Totals
11N	16E	30	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	.4

Total Acres: 0.4

Method of Determination: Aerial photography, GIS, and field verification

D. FLOW MEASUREMENTS

Not required for permits with irrigation of less than five (5) acres per new Beneficial Use Examination Rules implemented 3/29/2012.

Theoretical yield: $Q = \frac{8.8 \times (H_p) \times (Eff)}{H}$

Where: $H_p = 2.5 H_p$ (from name plate on pump)

$Eff = 70\%$ (assumed)

$H = \text{elevation distance} + 2.31 \times \text{operating pressure}$ (assume elevation difference of 40.0 feet based on field observation and estimate of pumping height and assumed operating pressure of 30.0 psi based on lawn sprinkler).

$H = 40.0 \text{ feet} + (2.31 \times 30.0 \text{ psi}) = 109.3 \text{ feet}$

$$Q = \frac{8.8 \times (2.5) \times (0.70)}{109.3}$$

$Q = 0.14 \text{ cfs}$ Rate exceeds permitted amount of 0.02 cfs, therefore use permitted amount.

E. VOLUME CALCULATIONS

Not required for permits with irrigation using natural stream flow from a stream or spring per new Beneficial Use Examination Rules implemented 3/29/2012.

F. NARRATIVE/REMARKS/COMMENTS

Application for Permit 72-16811 was filed on November 17, 2009 by Robert H Bryson to appropriate 0.02 cfs of water from the Salmon River for irrigation of 0.9 acres on parcel # RPHO11N16E5200 within HES 322 in Custer County. The permit was approved on March 9, 2010 and Proof of Beneficial Use was filed on October 12, 2010. On September 10, 2012, while in the area, Jeff Cooper and I met Mr and Mrs. Robert Bryson and conduct the licensing exam for the permit.

The 72-16811 system consists of a 2.5 Hp pump (Starite model # DHH6-53L) that diverts water from the Salmon River and a 1.5 inch diameter PVC line conveying the water to the sprinkler irrigation system at the place of use (parcel number RPHO11N16E5200 within HES 322). Note that the permitted place of use is 0.9 acres, but the IDWR Custer County Tax lot data indicates that the property is only 0.7 acre in size and the Custer County Assessor's Office website indicates that the property is 0.811 acres in size. The property has a home with an attached garage, shop and deck, a driveway and the southern portion of the property is quite steep and slopes off towards the Salmon River. Using GIS and accounting for these non irrigated areas, it is estimated that the irrigation place of use is approximately 0.4 acre in size. A theoretical estimate indicates that the 2.5 hp pump and system can divert more than the permitted rate of 0.02 cfs. It is recommended that license 72-16811 be issued for the irrigation of 0.4 acre with a diversion rate of 0.02 cfs.

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

H. 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	0.020 CFS	N/A
<u>Totals:</u>		0.020 CFS	N/A

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 ☐ Other

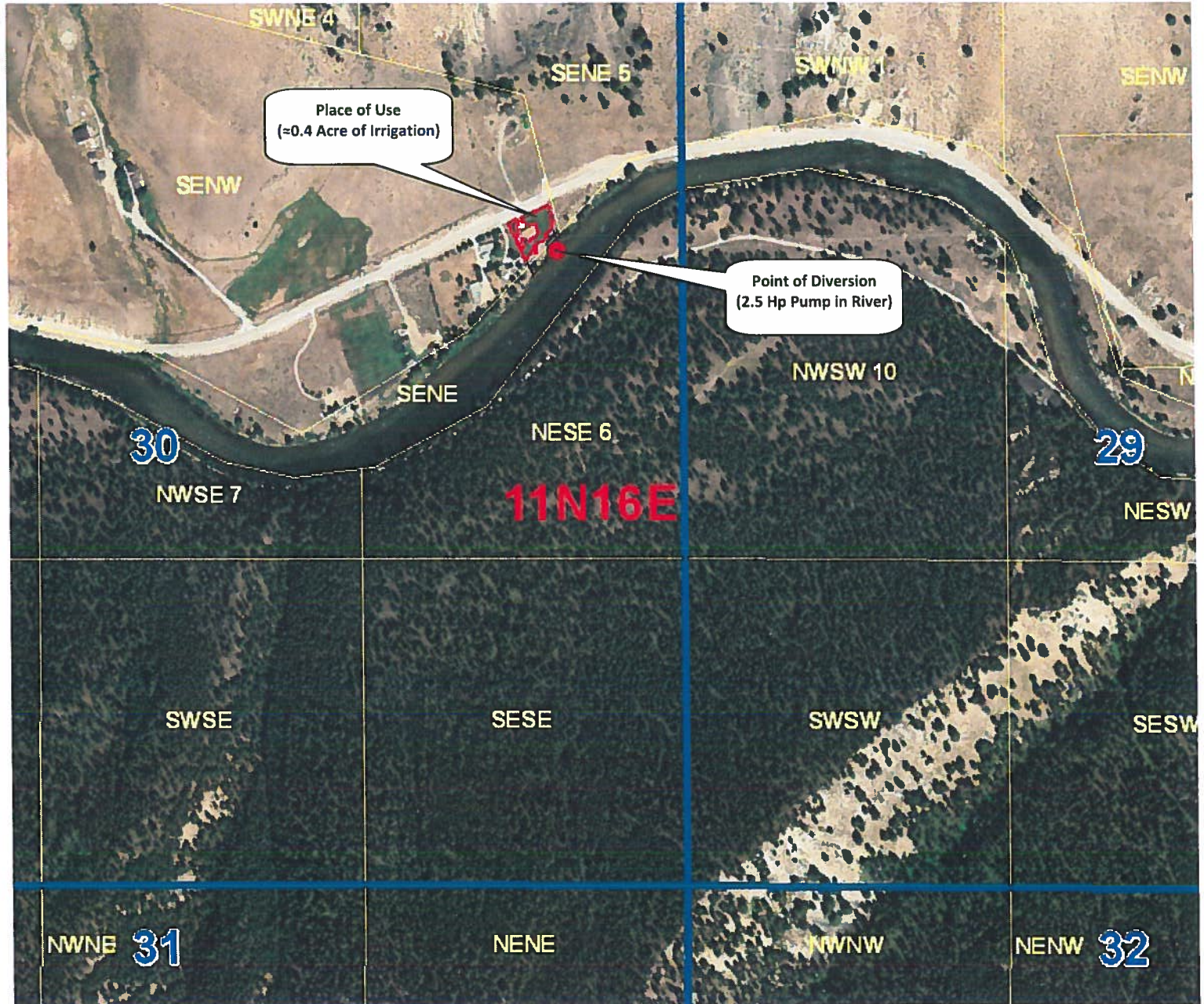
I. AUTHENTICATION

Field Examiner's Name Ray Shin Date 2/28/13

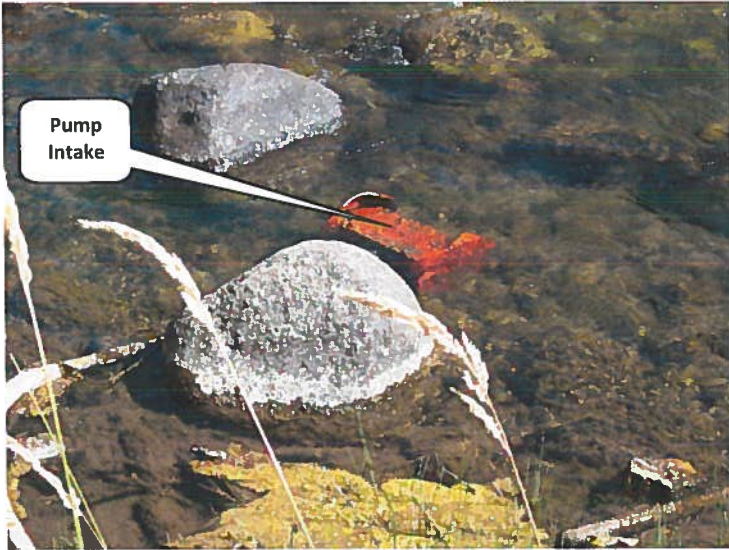
Reviewer [Signature] Date 3/14/13

72-16811 Point of Diversion and Place of Use Map

2011 Aerial Photography



72-16811 Point of Diversion Photos



View of 72-16811 Pump Intake in Salmon River



View of 72-16811 Pump (2.5 Hp Starite)



View of Pump Nameplate (model # DHH6-53L)

72-16811 Place of Use Photos



View of 72-16811 Place of Use in front (north) of house on Parcel # RPHO11N16E5200 within HES 322 in Custer County



View of 72-16811 Place of Use on east side of house on Parcel # RPHO11N16E5200 within HES 322 in Custer County



View of 72-16811 Place of Use behind (south) of house on Parcel # RPHO11N16E5200 within HES 322 in Custer County