

STATE OF IDAHO  
DEPARTMENT OF WATER RESOURCES  
BENEFICIAL USE FIELD REPORT

**A. GENERAL INFORMATION**

Permit No: 92-10889  
Exam Date: 06/15/2020

1. Current Owner:  
ELYSHA JOHNSON PO BOX 362 TWISP WA 98856 OR  
JOHN THOR JOHNSON PO BOX 362 TWISP WA 98856
2. Accompanied by: John Thor Johnson  
Phone No: 509-341-9135  
Address: Same as above  
Relationship to permit Holder: Permit Holder

3. **SOURCE:**  
UNNAMED STREAM

Tributary  
ST MARIES RIVER

Method of Determination: DRG and Arcmap

**B. OVERLAP REVIEW**

1. Other water rights with the same place of use: YES Overlap

Water Right No.	Source	Purpose of Use	Basis
92-10888	UNNAMED STREAM	IN-STREAM STOCKWATER	DECREEED

Comments: WR 92-10888 is decreed to same applicant for in-stream stockwater use from same unnamed stream as this water right. As stock drink directly from stream down grade from this WR's POD, there is not a concern for overlap.

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

Water Right No.	Source	Purpose of Use	Basis

Comments: \_\_\_\_\_

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

UNNAMED STREAM SW¼ NW¼, Sec. 9, Twp 45N, Rge 02W, B.M. BENEWAH County

Method of Determination: GPS and Field Exam. POD is water transfer pump with flex hose in stream located at -116°36.407, 47°15.900.

**PLACE OF USE:** IRRIGATION

Twp	Rng	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
45N	02W	9							10.0										10.0

Total Acres: 10.0

Method of Determination: Field exam and Arcmap.

3. Delivery System Diagram Attached (required). Indicate all major components and distances between components.  
☒ Indicate weir size/pipe as applicable.

☒ Map Attached Showing Location(s) of point(s) of diversion and place(s) of use (required). Scale must be 1:24,000 or greater.

☒ Aerial Photo Attached (required for irrigation of 10+ acres).

☒ Photo of Diversion and System Attached

4.

Well or Diversion ID No.*	Motor Make	Hp	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size
NONE					

#### D. FLOW MEASUREMENTS

1.

Measurement Equipment	Type	Make	Model No.	Serial No.	Size	Calib. Date
5 GAL BUCKET TEST						

2. Measurements: A 5 gallon bucket test was completed from applicant's water transfer pump and 4-way hose splitter, with 4EA 100 foot garden hoses in bucket, resulting in a diversion flow rate of 5 gal / 10.85 sec x 60 sec/min = 27.6 gpm = 0.06 cfs.

#### E. FLOW CALCULATIONS

☒ Additional Computation Sheets Attached

Measured Method: 5 GAL Bucket Test = (5 gal / 10.85 sec) x 60 sec/min = 27.6 gpm or 0.06 cfs

#### F. VOLUME CALCULATIONS

1. Volume Calculations for irrigation:

$$V_{IR} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 10 \text{ acres} \times 3.0 \text{ afa} = 30 \text{ af}$$

$$V_{DR} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.06 \text{ cfs} \times 231 \text{ days} \times 1.9835 = 27.5$$

$$V = \text{Smaller of } V_{IR} \text{ and } V_{DR} = 27.5 \text{ af}$$

2. Volume Calculations for Other Uses:

This is a surface water source, so no volumes will be applied to the water right license.

#### G. NARRATIVE/REMARKS/COMMENTS

Field exam conducted on 6/15/2020 with the applicant, John Thor Johnson, showed water being diverted from an unnamed stream for irrigation purposes. At the POD, applicant used a water transfer pump with 2" fire hose that diverted water to a 4-way garden hose splitter. Applicant stated he had several lengths of fire hose attachments, from which he ran down his road, rotating 100 foot garden hose to above ground tripod sprinklers at intervals throughout his 10 acres of irrigation POU. A 5 gallon bucket test was completed from applicant's water transfer pump and 4-way hose splitter, with 4EA 100 foot

garden hoses in bucket, resulting in a diversion flow rate of  $5 \text{ gal} / 10.85 \text{ sec} \times 60 \text{ sec/min} = 27.6 \text{ gpm} = 0.06 \text{ cfs}$ , which will be applied as the irrigation rate of diversion and Maximum Diversion Rate applied to the WR license. Applicant had permitted for a diversion rate of 0.20 cfs, but is limited to his water transfer pump performance at time of field exam.

During field exam, applicant had irrigation hoses and tripod sprinklers set up at intervals, and photographs were taken to illustrate applicant's irrigation operation. Applicant stated he irrigated forested areas to keep the area green throughout the season. During licensing review, arcmap was used to trace out irrigated acreage equal to 10 acres. Annual volume calculations for 10 acres would equate to  $V_{DR}$ , the Smaller of  $V_{IR}$  and  $V_{DR} = 0.06 \text{ cfs} \times 231 \text{ days} \times 1.9835 = 27.5 \text{ af}$ . As this is a surface water source, no volumes will be applied to the water right license.

Condition 26A was removed from license. Condition 227 was updated to include U.S. Geological Survey St. Maries near Santa gauging station, No. 12414900, as it relates to monitoring MSF and restricting diversion of water by applicant under MSF conditions. WR 92-10888 is decreed to same applicant for in-stream stockwater use from same unnamed stream as this water right. As stock drink directly from stream down grade from this WR's POD, there is not a concern for overlap.

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

#### H. RECOMMENDATIONS

##### 1. Recommended Amounts

Beneficial Use	Period of Use	Rate of Diversion
IRRIGATION	03/15 to 10/31	0.06 CFS

**Totals:** 0.06 CFS

##### 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

#### I. AUTHENTICATION

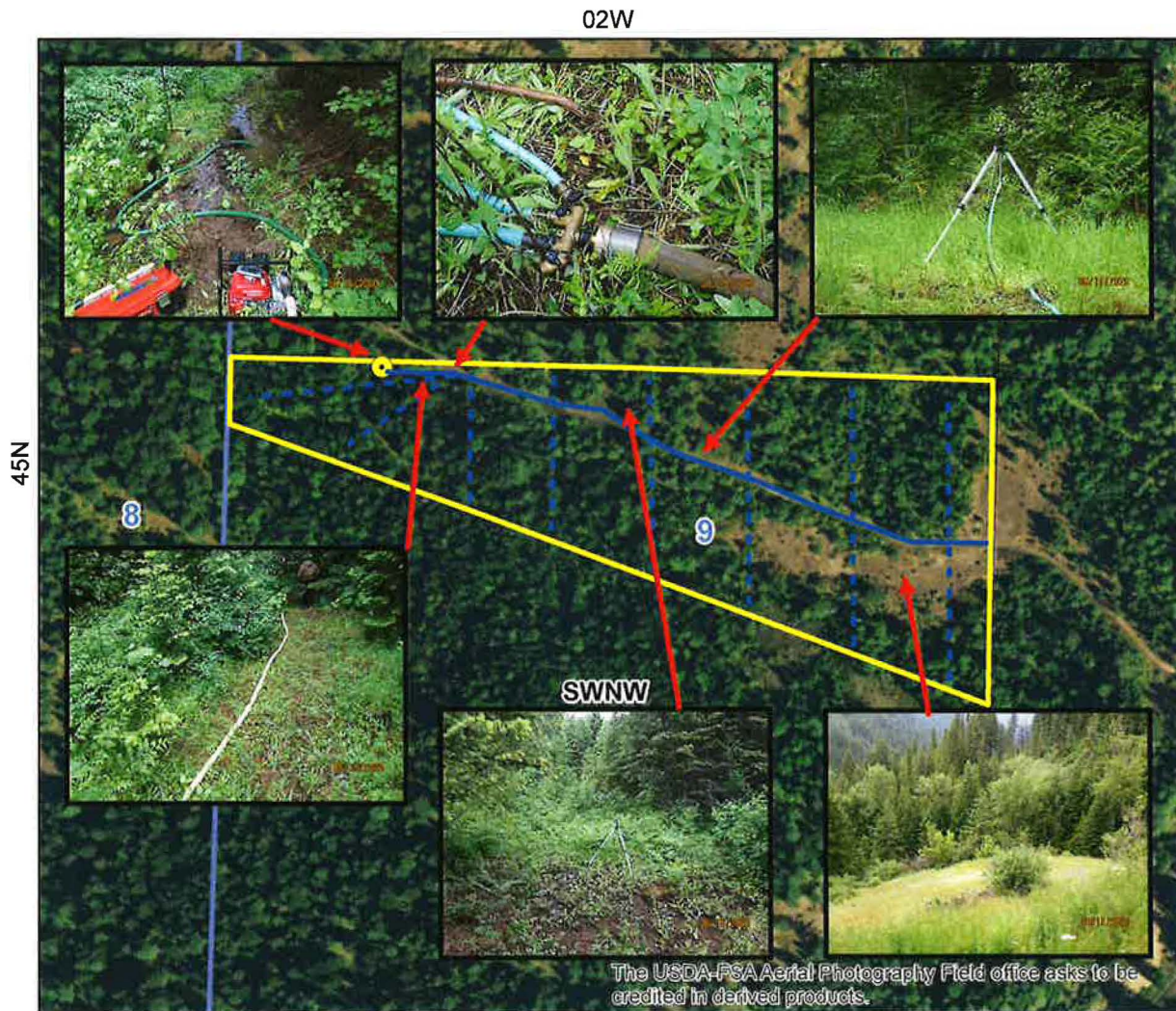
Luke Bates - Water Resource Agent

Field Examiner's Name *Luke Bates* Date 6/24/2020

Reviewer *Adam Franklin* Date 6/30/2020

State of Idaho  
Department of Water Resources  
**Attachment to Field Exam**  
92-10889

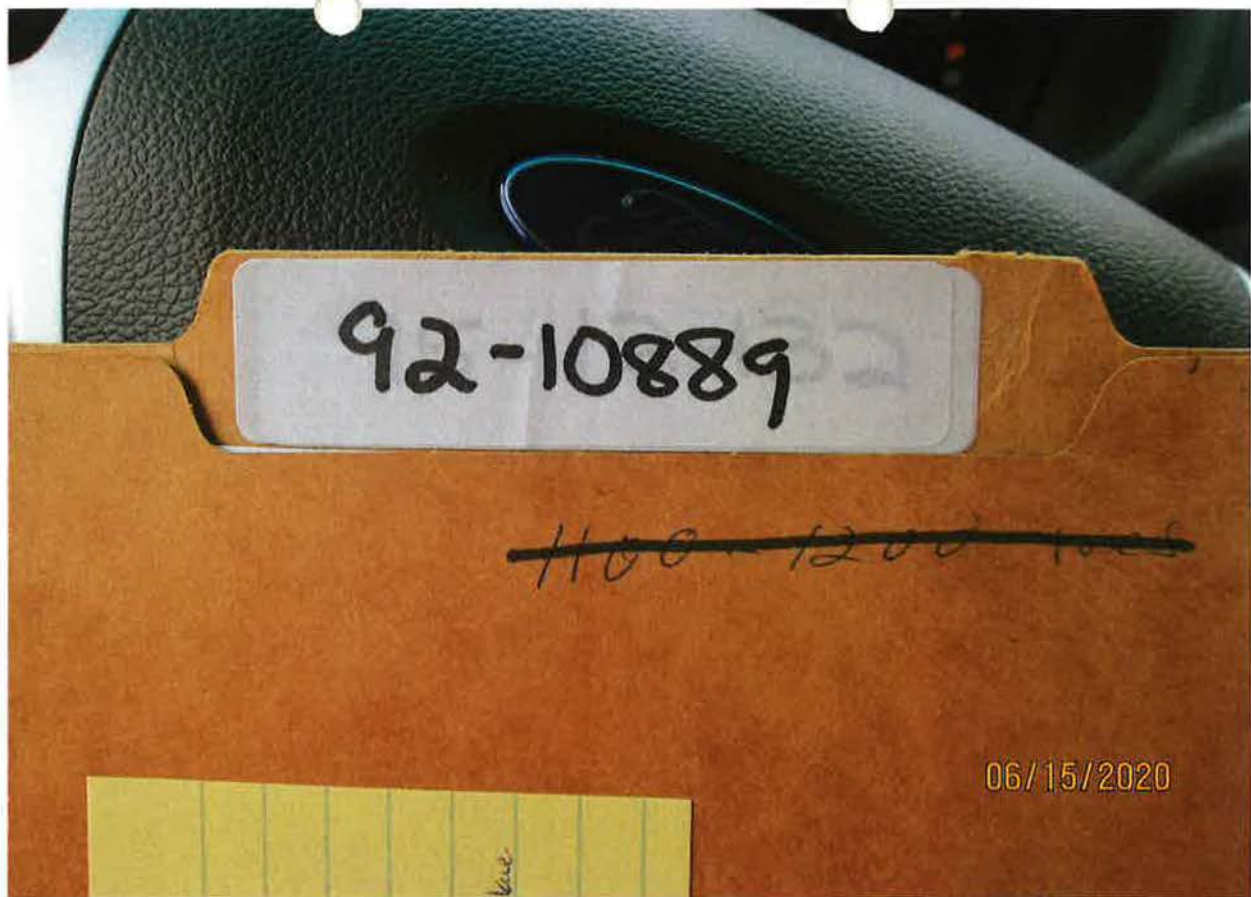
IRRIGATION system diagram.



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

0 0.0375 0.075 0.15 Miles





POD – WATER TRANSFER PUMP FROM STREAM



2 INCH FIRE HOSE FROM POD-TO-POU



IRRIGATION POU – 4 WAY HOSE SPLITTER



IRRIGATION POU





IRRIGATION POU



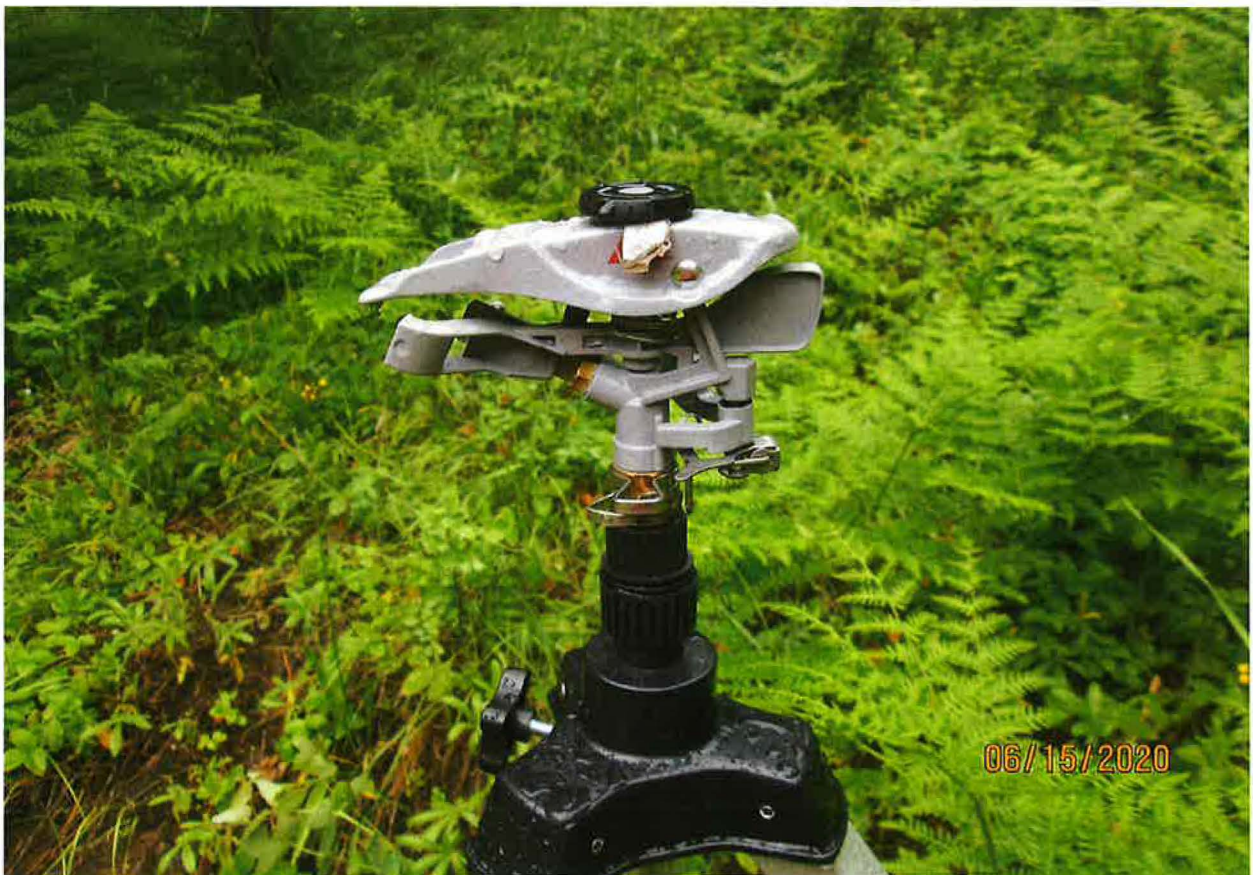


IRRIGATION POU





IRRIGATION POU



SPRINKLER HEAD FOR IRRIGATION