

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 95-11046
Exam Date: 07/30/2020

1. Current Owner:
RANDY BATES 841 S PLEASANTVIEW RD POST FALLS ID 83854 OR
SUSAN BATES 841 S PLEASANTVIEW RD POST FALLS ID 83854
2. Accompanied by: Randy Bates
Phone No: 208-755-6931
Address: Same as above
Relationship to permit Holder: Permit Holder

3. **SOURCE:**
SPOKANE RIVER

Tributary
COLUMBIA RIVER

Method of Determination: Arcmap and DRG.

B. OVERLAP REVIEW

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

Water Right No.	Source	Purpose of Use	Basis
95-7568	SPOKANE RIVER	IRRIGATION	LICENSE
95-11011	GROUND WATER	DOMESTIC	DECREED

Comments: licensed right 95-7568 is for irrigation use for a large tract of land, for irrigation use from the Spokane River not associated with the applicant's water system. Right 95-7568 is a parent right with associated children rights 95-16626 and 95-16627; both children right POU's are on the opposite side of the river than this right, and not a concern for overlap with right 95-11046. Decreed right 95-11011 uses groundwater from a well to service domestic use for 1 home with irrigation for same applicant as right 95-11046.

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 SYSTEM1. **LOCATION OF POINT(S) OF DIVERSION:**

SPOKANE RIVER L1 (SW¼ NW¼), Sec. 8, Twp 50N, Rge 05W, B.M. KOOTENAI County

Method of Determination: GPS; POD is a submersible pump in river located at -117°00.018, 47°41.801.

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	
50N	05W	7				0.2 L4													0.2
50N	05W	8							0.3 L1										0.3
50N	05W	8							0.4										0.4

Total Acres: 0.9

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
N/A					

D. FLOW MEASUREMENTS

1.

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

2. Measurements: Three 5 gallon bucket tests were completed, with average of three resulting in diversion flow rate of 16.69 gpm = **0.04 cfs**.

E. FLOW CALCULATIONS

Measured Method: 5 GAL Bucket Test = (5 gal / 17.93 sec) x 60 sec/min = 16.73 gpm
 = (5 gal / 17.90 sec) x 60 sec/min = 16.76 gpm
 = (5 gal / 18.08 sec) x 60 sec/min = 16.59 gpm

Average of 3ea 5 GAL Bucket Tests = (16.73 gpm + 16.76 gpm + 16.59 gpm) / 3 = 16.69 gpm = 0.04 cfs

F. VOLUME CALCULATIONS

1. Volume Calculations for irrigation:

$V_{IR} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 0.9 \text{ ac} \times 3.0 \text{ afa} = 2.7 \text{ ac}$

$V_{DR} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.04 \text{ cfs} \times 246 \text{ days} \times 1.9835 = 19.5$

$V = \text{Smaller of } V_{IR} \text{ and } V_{DR} = 2.7 \text{ af}$

2. Volume Calculations for Other Uses:

Irrigation use is from a surface water source, as such there are no volumes applied to license.

G. NARRATIVE/REMARKS/COMMENTS

Field exam conducted on 7/30/2020 with applicant, Randy Bates, showed water being diverted from the Spokane River using a portable water transfer pump with pipe in river for irrigation purposes. Applicant routed 3 inch pipe from a screened inlet upgrade to the pump, where it necked down to 2 inch pvc pipe routed upgrade another 20 feet to a multi-connection hose bib. Three 5 gallon bucket tests were completed, with average of three resulting in diversion flow rate of (5 gal) / (17.97 seconds) x (60 sec/min) = 16.69 gpm = **0.04 cfs** which will be applied to license. This diversion rate is greater than the Department standard for 0.9 acres that was identified during field exam as the POU beneficial use of irrigation has been applied to, which equals 0.9 ac x 0.03 cfs = 0.03 cfs considering Department rounding standards. The applicant does not irrigate 24/7 throughout the season of use; applicant has to route water upgrade from where the flow measurement was taken deriving this right's diversion rate that will result in a loss of pressure at the far reaches of the irrigation POU, and as such, is not in jeopardy of overuse of water due to the 0.01 cfs difference applied to license.

Applicant permitted for 1.5 acres of irrigation; at time of field exam, the irrigated acreage was sketched out. During licensing review, irrigation acreage was traced out using Arcmap aerial imagery and equals 0.9 acres. The annual volume requirement equals 0.9 ac x 3.0 afa = 2.7 af, but as this is a surface water source right, no volumes are applied to license. Applicant irrigated by connecting long lines of hose to a multi-connection PVC hose bib, and watering with above ground sprinklers. Applicant waters trees and grass along the driveway, small islands of vegetation near the front of his home, a garden area, and terraced landscaping and lawn from his home to the river frontage. Applicant intends to take over pressurized sprinkler irrigation that is serviced by a well (right 95-11011) so as not to overwork the well system. During the field exam, it was identified that applicant used river water to irrigate all the area where the pressurized sprinklers are installed, and depending on time requirements, alternates use of water from the well (95-11011) and this right (95-11046). An overlap condition is being applied at time of license to mitigate concerns for over diversion of water from either of the prior mentioned right's sources.

Irrigation occurred in both the both the SW $\frac{1}{4}$ NW $\frac{1}{4}$ GL1 and the SW $\frac{1}{4}$ NW $\frac{1}{4}$ of Section 8, but was permit approved for only irrigation within government lot 1. A memorandum was added to this right's file, as the irrigation was split between the governmental lot and non-governmental lot at time of licensing.

Condition 029 and 26A were removed from permit at time of licensing. Condition X35 was added to describe overlap of POU as follows:

- Decreed right 95-11011 uses groundwater from a well to service domestic use for 1 home with irrigation for same applicant as right 95-11046.

The addition of condition X35 listed above mitigates overlap concerns for this water right. There are no other concerns for overlap for this right.

Have conditions of permit approval been met? X Yes No

H. RECOMMENDATIONS**1. Recommended Amounts**

<u>Beneficial Use</u>	<u>Period of Use</u>	<u>Rate of Diversion</u>
IRRIGATION	03/15 to 11/15	0.04 CFS

Totals: 0.04 CFS

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

I. AUTHENTICATION

Luke Bates - Water Resource Agent

Field Examiner's Name



Date

8/25/2020

Reviewer



Date

8/31/2020

State of Idaho
Department of Water Resources
Attachment to Field Exam
95-11046

IRRIGATION system diagram.



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

0 0.035 0.07 0.14 Miles



MEMORANDUM

To: Water Right Permit 95-11046

From: Luke Bates 

Date: 8/25/2020

Re: Application for Water Permit and associated Government Lot Designation

An application for permit was approved for the applicants, Randy and Susan Bates, for irrigation use. The place of use (POU) permitted for was designated as the parcel owned by the applicants, but did not accurately designate irrigation occurring in both the SW¼NW¼GL1 and the SW¼NW¼ of Section 8. As a result, the POU for irrigation permitted for identified 0.8 acres occurring in SW¼NW¼GL1 only.

Post field exam and during licensing review, it was identified that irrigation was occurring in both the SW¼NW¼GL1 and the SW¼NW¼. The POU was updated to reflect both the governmental lot portion (0.3 acres) and non-governmental lot portion (0.4 acres) of SW¼NW¼ for licensing purposes.

95-11046

FOR OFFICE USE ONLY	
Amt. of Fee \$	10.00
Receipt No.	C108225
Received By	K.M.
Date Received	1-14-2020

that development of a water right
and below. This form must be
Report prepared by a certified
the permit has changed, contact
this form. If you wish to relinquish
or an extension, please notify the

55-6931

7 Falls

1.000

mo. / yr.

7/30/2020

acre-feet

or other conditions of permit



POD – SCREENED PUMP IN RIVER



3 INCH PVC PIPE FROM POD UPHILL TO WATER TRANSFER PUMP



WATER TRANSFER PUMP



2 INCH PVC PIPE TO HOSE BIB IRRIGATION STUB WATER SYSTEM



IRRIGATION POU

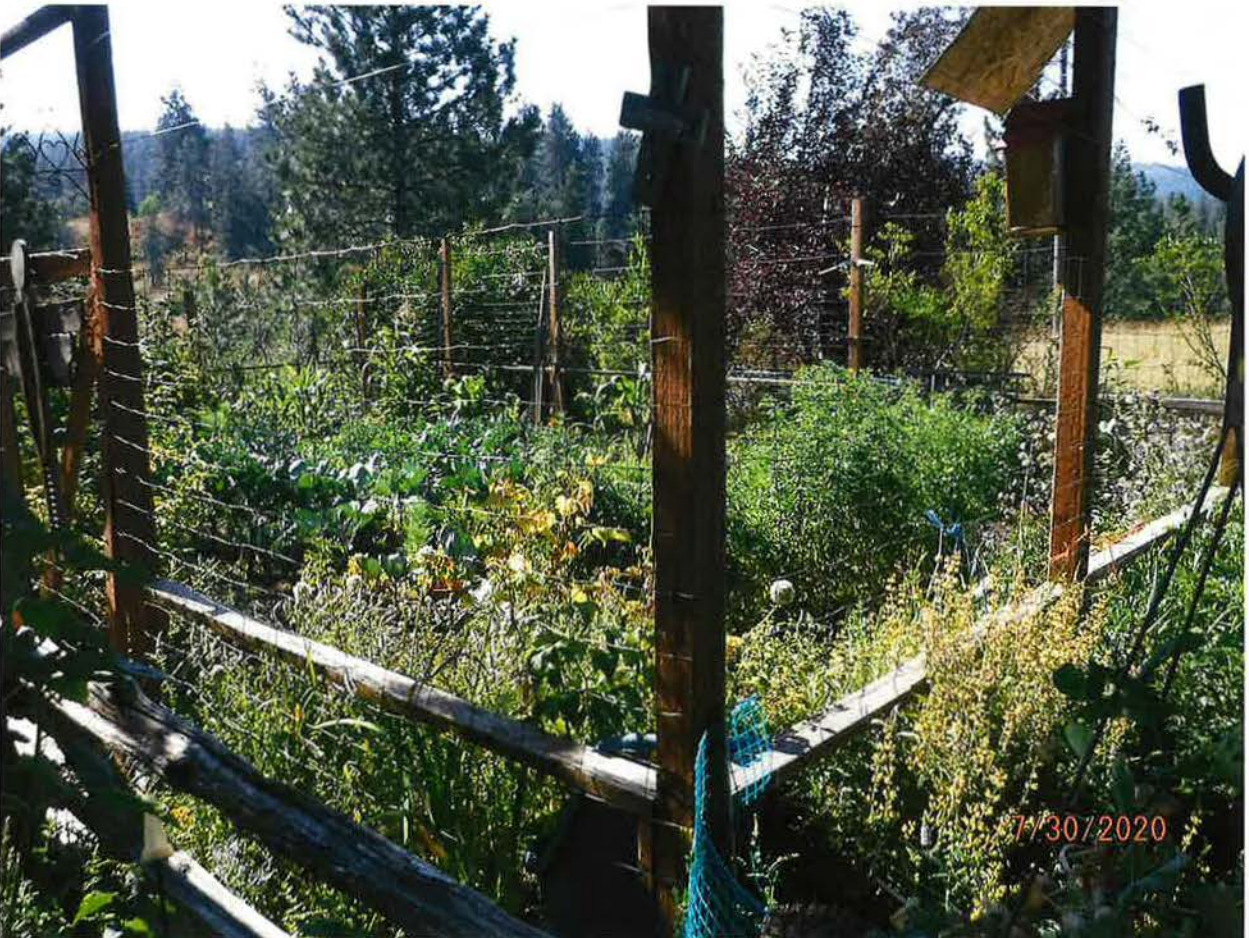


IRRIGATION POU





IRRIGATION POU





IRRIGATION POU





IRRIGATION POU





IRRIGATION POU

