

STATE OF IDAHO  
DEPARTMENT OF WATER RESOURCES  
BENEFICIAL USE FIELD REPORT

**A. GENERAL INFORMATION**

Permit No: 65-23762  
Exam Date: 9/23/2019

1. **Current Owner:** Eric Bry
2. **Accompanied by:** Eric Bry, Owner
3. **Source:** Scriver Creek

**Tributary:** Middle Fork Payette River

**Method of Determination:** Field Exam, aerial imagery, NHD

**B. OVERLAP REVIEW**

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

| Water Right No. | Source        | Purpose of Use  | Basis   |
|-----------------|---------------|-----------------|---------|
| 65-12103        | Groundwater   | Domestic        | Decreed |
| 65-12347        | Groundwater   | Domestic        | Decreed |
| 65-13412        | Scriver Creek | Fire Protection | License |

**Comments:** Rights 65-12103 and 65-12347 are the source of domestic water for the subdivision. Other POUs are within the QQs but not on this property.

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

| Water Right No. | Source | Purpose of Use | Basis |
|-----------------|--------|----------------|-------|
|                 |        |                |       |

**Comments:** There are multiple diversions from Scriver Creek in the QQs, but they are located on other properties and use separate pumps.

**C. DIVERSION AND DELIVERY SYSTEM**

1. **Point(s) of Diversion:**  
SHRIVER CREEK SE ¼ SW ¼, Sec. 22, Lot 3, Twp, 10N Rge, 04E

Boise County

**Method of Determination:** Field Exam, Permit holder's description

2. **Place of Use:**  
Domestic

| Twp | Rng | Sec | NE |    |    |    | NW |    |    |    | SW |    |    |         | SE |    |    |    | Totals |
|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|----|---------|----|----|----|----|--------|
|     |     |     | NE | NW | SW | SE | NE | NW | SW | SE | NE | NW | SW | SE      | NE | NW | SW | SE |        |
| 10N | 04E | 22  |    |    |    |    | X  |    |    |    |    |    |    | X<br>L3 |    |    |    |    |        |

**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 |        |
| 10N | 04E | 22  |    |    |    |    |    |    |    |    |    |    |    | 1  |    |    |    |    | 1      |

Total Acres: 1

**Method of Determination:** Field Exam

3. **Supporting Documents:**

- X   Delivery System Diagram Attached (required). Indicate all major components and distances between components.  
  X   Indicate weir size/pipe as applicable.
- X   Map Attached Showing Location(s) of point(s) of diversion and place(s) of use (required). Scale must be 1:24,000 or greater.
- X   Aerial Photo Attached (required for irrigation of 10+ acres).

☒ Photo of Diversion and System Attached

#### 4. Diversion Pumps

| Well or Diversion ID No.* | Motor Make | Hp  | Motor Serial No. | Pump Make     | Pump Serial No. or Discharge Size |
|---------------------------|------------|-----|------------------|---------------|-----------------------------------|
|                           | Red Lion   | 1/2 | 32811FM          | MOD C48A96B67 |                                   |

#### D. FLOW MEASUREMENTS

##### 1. Equipment

| Measurement Equipment | Type | Make | Model No. | Serial No. | Size | Calib. Date |
|-----------------------|------|------|-----------|------------|------|-------------|
|                       |      |      |           |            |      |             |

2. **Measurement Description:** No measurements were taken. The pump had been pulled from the creek for the season.

#### E. FLOW CALCULATIONS

☒ Additional Computation Sheets Attached

##### Measurements:

The owner said he uses a 1 inch garden hose from the pump that goes to a portable sprinkler. He estimates 10 – 15 gpm (0.02 – 0.03 cfs).

##### Irrigation Use:

Administrative Processing Memo #17 indicates 0.03 cfs/acre for irrigation up to 5 acres.

Admin memo allows: 1.0 acres x (0.03cfs) = 0.03 cfs

Permit authorizes: 0.02 cfs

Capacity of the pump: 0.03 cfs (see attached theoretical)

**Recommend licensing 0.02 cfs for irrigation use.**

##### Domestic Use:

Administrative Processing Memo #22 indicates 0.04 cfs for one household.

Permit authorizes: 0.03 cfs

Capacity of the pump: 0.03 cfs (see attached theoretical)

**Recommend licensing 0.03 cfs for domestic use.**

#### F. VOLUME CALCULATIONS

##### 1. Volume Calculations for irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 1 \times 3.5 = 3.5 \text{ AF}$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.02 \times 231 \times 1.9835 = 9.1 \text{ AF}$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 3.5 \text{ AF}$$

##### 2. Volume Calculations for domestic:

Administrative Processing Memo #22 indicates 0.6 AFA for one household.

#### G. NARRATIVE/REMARKS/COMMENTS

A ½ hp pump is used to transport water from Scriver Creek to irrigate the property with a portable sprinkler. At the time of the field exam the pump had been removed from the creek for the year and was stored in the lockable garage. The primary purpose of the domestic use is as back up for the Homeowners Association primary domestic water supply which has been unavailable on occasion. In the event that use of Scriver Creek water for domestic use becomes necessary the sprinkler will be disconnected, the water run via hose to the house using a generator, and the water used for purposes such as personal care. In addition, the domestic use is used for outdoor tasks such as washing automobiles and hosing off equipment.

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

**H. RECOMMENDATIONS****1. Recommended Amounts**

| <u>Beneficial Use</u> | <u>Period of Use</u> | <u>Rate of Diversion</u> | <u>Volume</u> |
|-----------------------|----------------------|--------------------------|---------------|
| IRRIGATION            | 3/01 to 11/15        | 0.02 CFS                 | 3.5 AF        |
| DOMESTIC              | 01/01 TO 12/31       | 0.03 CFS                 | 0.6 AF        |

**Totals:**~~0.05~~ CFS

4.1 AF

0.03

CP 12-13-19

**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**

Field Examiner's Name

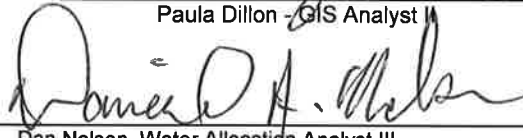


Paula Dillon - GIS Analyst II

Date

11/5/2019

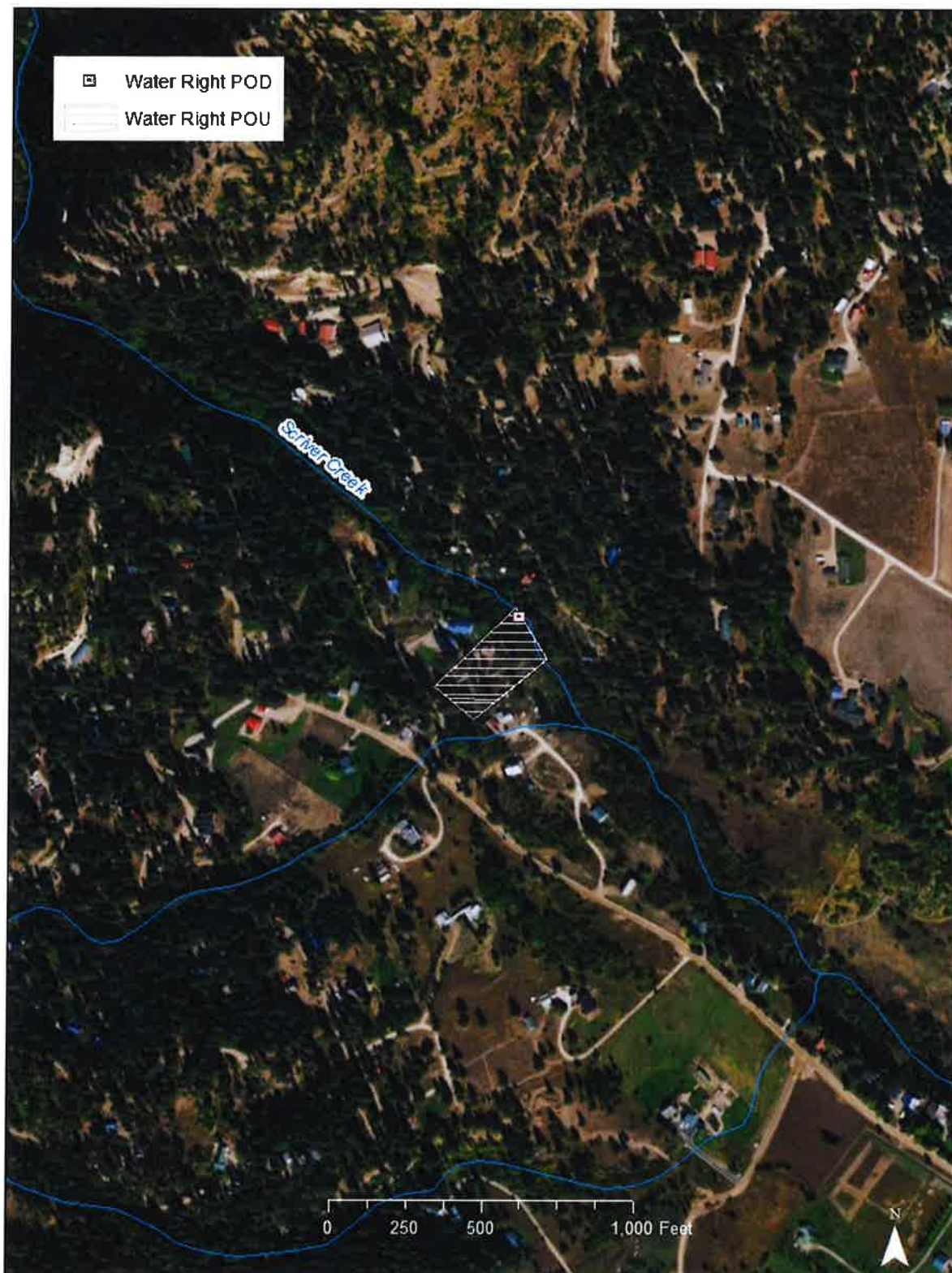
Reviewer

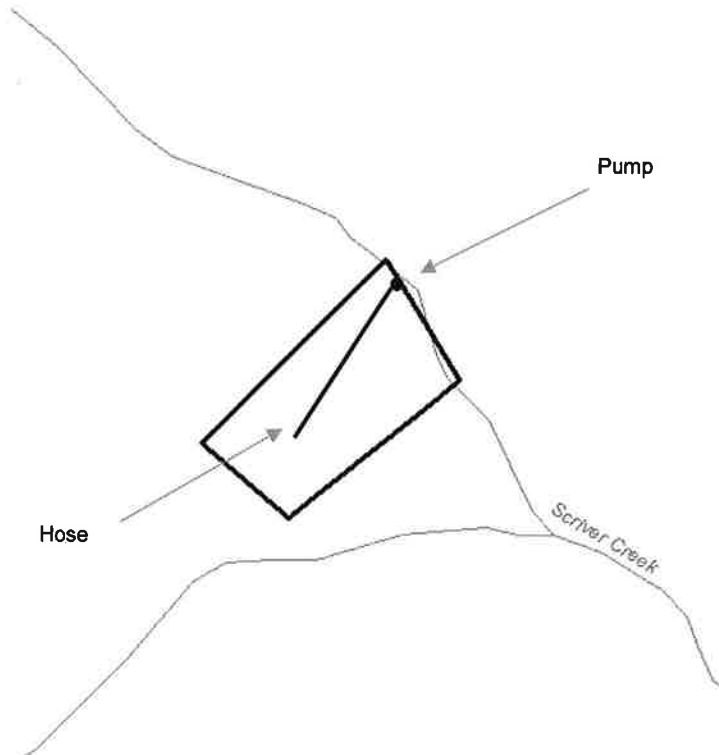


Dan Nelson, Water Allocation Analyst III

Date

11-7-19



System Diagram

## THEORETICAL HORSEPOWER EQUATION WORKSHEET (cjh 1/92)

Water Right No.: 65-23762  
 Reviewer: Paula Dillon  
 Date of Review: 9/23/2019

P/D No.:

PUMP HORSEPOWER  
 BOOSTER HORSEPOWER

PUMPING LEVEL

DISCHARGE PRESSURE

RATE OF FLOW (cfs)

|            |
|------------|
| Scriber Ck |
| 0.5        |
| 0          |
| 2          |
| 50         |
| 0.03       |
| 12         |

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:**

The pump sits on the creek bank approximately 2 feet above water level. The discharge pressure to run the sprinkler was estimated to be approximately 50 psi.

Photos



Pump stored in garage for the winter.



Pump specs.



This is where the pump is located during the season.



From the road looking toward the house.



Near the house looking toward the creek.



From the creek looking toward the house.