

STATE OF IDAHO  
DEPARTMENT OF WATER RESOURCES  
**BENEFICIAL USE FIELD REPORT**

**A. GENERAL INFORMATION**

Permit No: 74-7388

Exam Date: 10/2/2012

1. Current Owner: EAGLE VALLEY RANCH LLC  
446 BOHANNON CREEK RD  
SALMON ID 83467  
(208) 756-1733
2. Accompanied by: Lothar Eichner  
Phone No: (208) 756-2429  
Address: 446 Bohannon Creek Road; Salmon ID 83406  
Relationship to Permit Holder: employee

3. SOURCE TRIBUTARY  
BOHANNON CREEK LEMHI RIVER

**B. OVERLAP REVIEW**

1. Other water rights with the same place of use: 74-457 – irrigates the field surrounding the pond
2. Other water rights with the same point of diversion: 74-457

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

BOHANNON CREEK NE1/4SW1/4 Sec. 28, Twp 21N, Rge 23E, B.M. LEMHI County

Method of Determination: GPS and Visual Inspection.

2.

PLACE OF USE: RECREATION STORAGE and DIVERSION TO STORAGE

| Twp | Rge | Sec | NE        |           |           |           | NW        |           |           |           | SW        |           |           |           | SE        |           |           |           | Totals |
|-----|-----|-----|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|--------|
|     |     |     | <u>NE</u> | <u>NW</u> | <u>SW</u> | <u>SE</u> | <u>NE</u> | <u>NW</u> | <u>SW</u> | <u>SE</u> | <u>NE</u> | <u>NW</u> | <u>SW</u> | <u>SE</u> | <u>NE</u> | <u>NW</u> | <u>SW</u> | <u>SE</u> |        |
| 21N | 23E | 28  |           |           |           |           |           |           |           |           |           |           |           | X         |           |           |           |           |        |

Method of Determination: GIS Mapping and Visual Inspection.

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

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

YES Aerial Photo Attached

YES Photo of Diversion and System Attached

4.

Well or DiversionID No.\*Motor MakeHpMotor Serial No.Pump MakePump Serial No. or Discharge Size**D. FLOW MEASUREMENTS**

1. None taken

MeasurementEquipmentTypeMakeModel No.Serial No.SizeCalib. Date

2. Measurements: None

**E. FLOW CALCULATIONS**X Additional Computation Sheets Attached

Measured Method:

Manning's Calculation: 0.24 cfsPermit rate of diversion: 0.2Recommended rate of diversion: 0.2**F. VOLUME CALCULATIONS**

1. Volume Calculations for Irrigation: n/a

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = \text{n/a}$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = \text{n/a}$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = \text{n/a}$$

2. Volume Calculations for Other Uses:

Recreation Storage:

8 feet average depth X 0.075 acres = 0.6 AF

Total Recommended acre feet per year is 0.6 AF per year**G. NARRATIVE/REMARKS/COMMENTS**

A point of diversion from Bohannon Creek in T21N R23E Section 28 NESW in Lemhi County provides water for a pond. Water is diverted from the creek through a perforated culvert pipe. An underground pipe carries water approximately 800 feet to the north end of a 0.07 acre pond. From the pond, water flows through an approximately 24 feet length of pipe to an open channel and back into Bohannon Creek. Water for this pond is diverted on the permit holder's property and returns from the pond to the creek, also on the permit holder's property.

During the spring and other times of high creek flow, water is diverted into the pond and back into the creek. At times of low flow no water is diverted to the pond.

Water right 74-457 supplies irrigation for the land surrounding the pond and the land on the opposite side of Bohannon Creek. 74-457 and 74-7388 do not share the same system.

Have conditions of permit approval been met? \_\_\_ Yes X No**H. RECOMMENDATIONS****1. Recommended Amounts**

| <u>BENEFICIAL USE</u> | <u>PERIOD OF USE</u> | <u>DIVERSION RATE</u> | <u>ANNUAL VOLUME</u> |
|-----------------------|----------------------|-----------------------|----------------------|
| RECREATION STORAGE    |                      |                       | 0.60 AF              |
| DIVERSION TO STORAGE  | 01/01 to 12/31       | 0.200 CFS             |                      |
| <u>Totals:</u>        |                      | 0.200 CFS             | 0.60 AF              |

**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 \_\_\_ Other

I. AUTHENTICATION

Field Examiner's Name Sandra Tind Date 11/6/2013

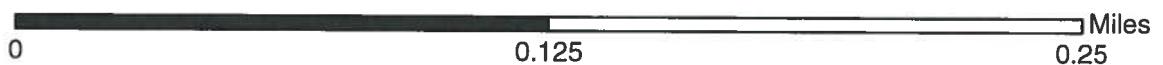
Reviewer \_\_\_\_\_ Date \_\_\_\_\_

State of Idaho  
Department of Water Resources  
**Water Right License**  
74-7388

This map depicts the RECREATION place of use boundary for this water right at the time of this approval and is attached to the approval document solely for illustrative purposes.

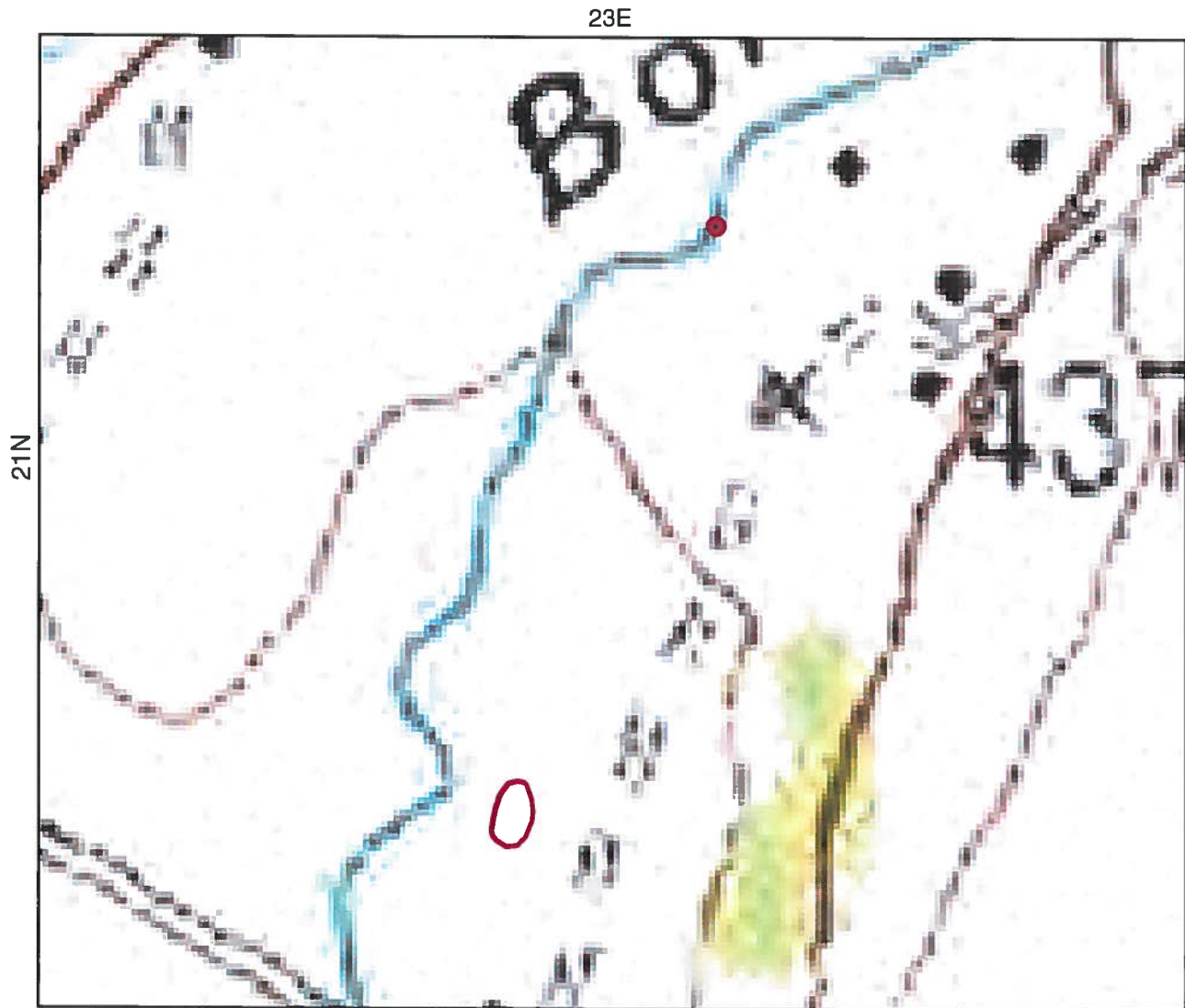


- Point of Diversion
- Place Of Use Boundary



State of Idaho  
Department of Water Resources  
**Water Right License**  
74-7388

This map depicts the RECREATION place of use boundary for this water right at the time of this approval and is attached to the approval document solely for illustrative purposes.



- Point of Diversion
- Place Of Use Boundary



## System Diagram for Water Right 74-7388



A point of diversion from Bohannon Creek in T21N R23E Section 28 NESW in Lemhi County provides water for a pond. Water is diverted from the creek through a perforated culvert pipe. An underground pipe carries water approximately 800 feet to the north end of a 0.07 acre pond. From the pond, water flows through an approximately 24 feet length of pipe to an open channel and back into Bohannon Creek.

Water right 74-457 supplies irrigation for the land surrounding the pond and the land on the opposite side of Bohannon Creek. 74-457 and 74-7388 do not share the same system.

74-7388

### Manning's Equation Calculator for Flow Rate in a Circular Conduit Flowing Full

S = 0.0348 ft/ft  
n = 0.009 manning's coefficient  
d = 3.0 pipe diameter (inches)  
D = 0.25 pipe diameter (feet)  
r = 0.13 pipe radius (feet)  
A = 0.05 area (ft<sup>2</sup>)  
WP = 0.79 wetted perimeter (ft)  
R = 0.06 hydraulic radius (ft)

Q = 0.24 flow rate (CFS)

### Channel Slope

Slope Options

☐ Manual Entry ☒ Slope Calculator

### Slope Calculator

Rise = 27.82 feet

Run = 800 feet

Slope, S = 0.0348 ft/ft

Pipe Material, (n):

plastic (pvc, abs)

Pipe Diameter (inches)

3.0 inches

PHOTOGRAPHER AND DATE OF PHOTOS Sandy Thiel, October 2, 2012

FILE NUMBER 74-7388



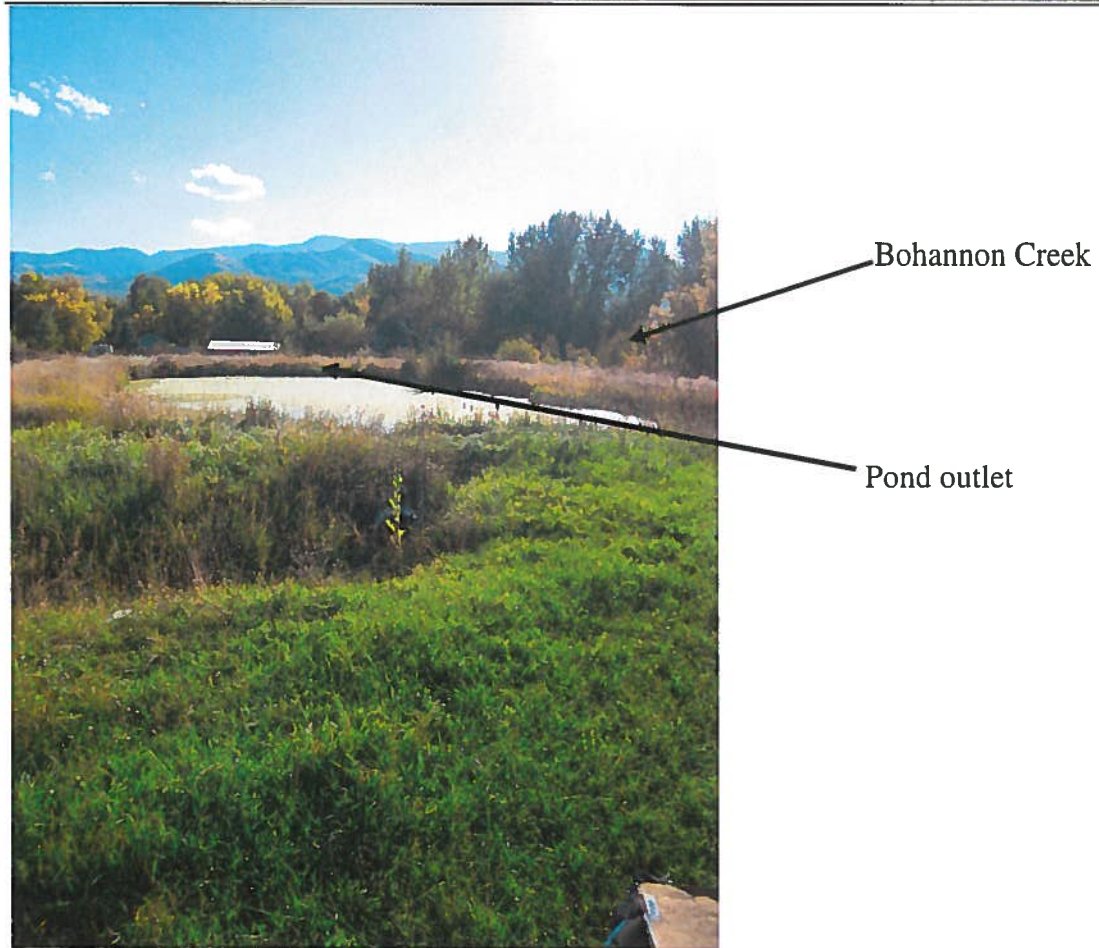
Bohannon Creek  
diversion looking up  
stream



Diversion looking  
downstream



From the bank of  
Bohannon Creek  
looking toward the  
pond





Pond

Pond outlet



Bohannon Creek

Pond outlet looking  
down stream

Pond outlet pipe