

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

**A. GENERAL INFORMATION**

Permit No: 75-7634

Exam Date: 9/12/2012

1. Current Owner: BERGER A TRUST  
C/O RONALD M AUEN TRUSTEE  
PO BOX 13390  
PALM DESERT CA 92255  
(760)341-5293
2. Accompanied by: Wayne Smith  
Phone No: (308) 641-7616  
Address: 16 Hot Springs Road; Carmen Idaho 83462  
Relationship to Permit Holder: employee of University of Idaho (current owner)

3. **SOURCE**

WASTE WATER

**TRIBUTARY**

SALMON 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: 75-10693

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

WASTE WATER SW1/4SW1/4 Sec. 29, Twp 23N, Rge 22E, B.M. LEMHI County

Method of Determination: GPS and visual inspection

2.

**PLACE OF USE:** RECREATION STORAGE

| Twp Rge Sec | NE |    |    |    | NW |    |    |    | SW |    |    |    | SE |    |    |    | Totals |
|-------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|--------|
|             | NE | NW | SW | SE | NE | NW | SW | SE | NE | NW | SW | SE | NE | NW | SW | SE |        |
| 23N 22E 29  |    |    |    |    |    |    |    |    |    |    | X  |    |    |    |    |    |        |
| 23N 22E 32  |    |    |    |    |    | X  |    |    |    |    |    |    |    |    |    |    |        |

Method of Determination:

3. X Delivery System Diagram Attached (required). Indicate all major components and distances between components. 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).
- X Photo of Diversion and System Attached

4.

| <u>Well or Diversion<br/>ID No.*</u> | <u>Motor Make</u> | <u>Hp</u> | <u>Motor Serial No.</u> | <u>Pump Make</u> | <u>Pump Serial No. or Discharge<br/>Size</u> |
|--------------------------------------|-------------------|-----------|-------------------------|------------------|----------------------------------------------|
| None                                 |                   |           |                         |                  |                                              |

**D. FLOW MEASUREMENTS**

1. None

| <u>Measurement<br/>Equipment</u> | <u>Type</u> | <u>Make</u> | <u>Model No.</u> | <u>Serial No.</u> | <u>Size</u> | <u>Calib. Date</u> |
|----------------------------------|-------------|-------------|------------------|-------------------|-------------|--------------------|
|                                  |             |             |                  |                   |             |                    |

2. Measurements:

**E. FLOW CALCULATIONS**none Additional Computation Sheets Attached

Measured Method: none

**F. VOLUME CALCULATIONS**

1. Volume Calculations for Irrigation:

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

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

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

2. Volume Calculations for Other Uses:

Pond area (determined using NAIP and GIS) 3.47 acres

Average pond depth 6 feet

$$3.47 \times 6 = 20.82$$

Evaporation Loss Calculation: 9.80 AFA

(see attached sheet)

$$20.82 + 9.8 = 30.6 \text{ AFA}$$

Permit volume 15.10

Recommended volume: 15.1 AFA**G. NARRATIVE/REMARKS/COMMENTS**

A series of ditches and drains contribute water to the pond located in township 23 north, range 22 east sections 32 and 29 in Lemhi County. Between 5 and 6 cfs flows into the pond year around. Big Flat Ditch, 0.6 miles to the east supplies water through a channel north of the east/west dirt road. McNutt ditch also flows into this channel from the south. Water from the Magic Ditch pools in a trench along the north/south dirt road. This ditch flows throughout the winter and spring, and dries up in late summer. They call it the Magic Ditch because water collects in the trench, with no evident source, about .25 miles south of the east-west road. The water from Big Flat, McNutt and Magic collects near the intersection of the two dirt roads. This ditch flows west along the south side of the road, to the confluence with the unnamed drain just south of the pond.

A headgate maintains the level of the pond. Excess water flows back to the Salmon River or to the north. Another headgate, approximately 20 feet from the pond outlet, is the point of diversion for water right 75-10693.

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> |
|-----------------------|----------------------|-----------------------|----------------------|
| RECREATION STORAGE    | 1/01 to 12/31        |                       | 15.10 AF             |
|                       | <u>Totals:</u>       |                       | 15.10 AF             |

##### 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 Samuel Lee Phil Date 1/22/2013

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

State of Idaho  
Department of Water Resources  
**Water Right License**  
75-7634

This map depicts the RECREATIONAL STORAGE 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.

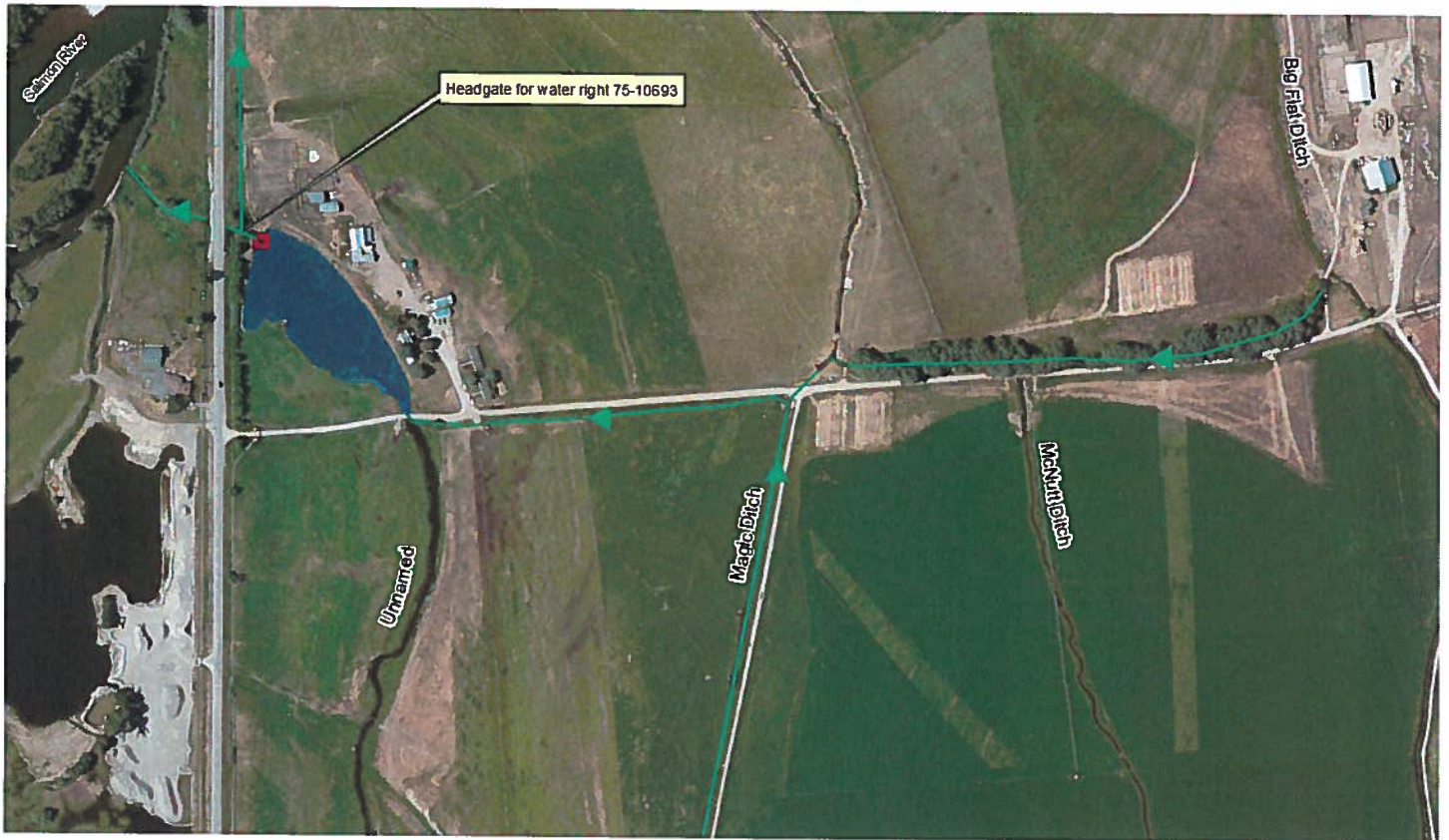


-  Point of Diversion
-  Place Of Use Boundary
-  Townships
-  PLS Sections
-  Quarter Quarters



0 0.02 0.04 0.06 0.08 Miles

## System Diagram for Water Right 75-7634



A series of ditches and drains contribute water to the pond located in township 23 north, range 22 east sections 32 and 29 in Lemhi County. Between 5 and 6 cfs flows into the pond year around. Big Flat Ditch, 0.6 miles to the east supplies water through a channel north of the east/west dirt road. McNutt ditch also flows into this channel from the south. Water from the Magic Ditch pools in a trench along the north/south dirt road. This ditch flows throughout the winter and spring, and dries up in late summer. They call it the Magic Ditch because water collects in the trench, with no evident source, about .25 miles south of the east-west road. The water from Big Flat, McNutt and Magic collects near the intersection of the two dirt roads. This ditch flows west along the south side of the road, to the confluence with the unnamed drain just south of the pond.

A headgate shown above as a red dot maintains the level of the pond. Excess water flows back to the Salmon River or to the north. Another headgate, approximately 20 feet from the pond outlet, is the point of diversion for water right 75-10693.

## Evaporation Loss Calculation

Date: December 5, 2012  
Prepared by: Sandra Beer Thiel  
Water Right No: 73-11964

P = Precipitation  
ET = Evapotranspiration  
 $P_d$  = Precipitation deficit  
 $P_d = P - ET$

$P_d$

Found at: <http://www.kimberly.uidaho.edu/ETIdaho/>

$P_d$  = convert to AFA: (mm/yr) / (convert to feet) x # acres =  
861 / 304.8 x 3.47 =  
(From ET Idaho)

$P_d = 9.80$  AFA



\* Use the Precipitation Deficit for 'P' value

# ET<sub>Idaho</sub> 2012 -- Evapotranspiration and Consumptive Irrigation Water Requirements for Idaho

Please send suggestions for improving this site to robison at kimberly dot uidaho dot edu Copyright 2012, University of Idaho.

## Salmon (NWS -- 108076)

Statistics based on thirty year normal spans 1979 to 2010 years

For a different land cover or crop click on the above link.

You can highlight this table and copy via the clipboard to a Microsoft Excel or OpenOffice spreadsheet to plot or otherwise work with this data.

| Open water - small stock ponds                                        |        |      |      |      |      |      |      |      |      |      |      |      |                             |                                 |        |
|-----------------------------------------------------------------------|--------|------|------|------|------|------|------|------|------|------|------|------|-----------------------------|---------------------------------|--------|
| Potential Evapotranspiration <a href="#">(Click here for a graph)</a> |        |      |      |      |      |      |      |      |      |      |      |      |                             |                                 |        |
|                                                                       | Jan    | Feb  | Mar  | Apr  | May  | Jun  | Jul  | Aug  | Sep  | Oct  | Nov  | Dec  | Growing Season <sup>a</sup> | Non Growing Season <sup>b</sup> | Annual |
| Mean <sup>j</sup>                                                     | mm/day |      |      |      |      |      |      |      |      |      |      |      | mm                          |                                 |        |
| Monthly <sup>c</sup>                                                  | 0.22   | 0.62 | 1.69 | 2.96 | 3.81 | 4.49 | 5.03 | 4.40 | 2.81 | 1.49 | 0.49 | 0.19 | 861                         | 0                               | 861    |
| 15-Day Moving Average <sup>d</sup>                                    | 0.22   | 0.60 | 1.70 | 2.99 | 3.84 | 4.46 | 5.07 | 4.40 | 2.79 | 1.48 | 0.48 | 0.18 |                             |                                 |        |
| 7-Day Moving Average <sup>e</sup>                                     | 0.22   | 0.61 | 1.69 | 2.96 | 3.82 | 4.46 | 5.05 | 4.41 | 2.79 | 1.49 | 0.49 | 0.18 |                             |                                 |        |
| 3-Day Moving Average <sup>f</sup>                                     | 0.22   | 0.61 | 1.69 | 2.96 | 3.81 | 4.47 | 5.03 | 4.41 | 2.80 | 1.49 | 0.49 | 0.19 |                             |                                 |        |
| Standard Deviation <sup>k</sup>                                       | mm/day |      |      |      |      |      |      |      |      |      |      |      | mm                          |                                 |        |
| Monthly <sup>c</sup>                                                  | 0.04   | 0.10 | 0.33 | 0.35 | 0.53 | 0.46 | 0.49 | 0.44 | 0.28 | 0.24 | 0.07 | 0.04 | 46                          | 0                               | 46     |
| 15-Day Moving Average <sup>d</sup>                                    | 0.04   | 0.12 | 0.31 | 0.48 | 0.55 | 0.59 | 0.40 | 0.42 | 0.40 | 0.28 | 0.11 | 0.03 |                             |                                 |        |
| 7-Day Moving Average <sup>e</sup>                                     | 0.06   | 0.17 | 0.40 | 0.65 | 0.78 | 0.77 | 0.49 | 0.54 | 0.51 | 0.40 | 0.15 | 0.05 |                             |                                 |        |
| 3-Day Moving Average <sup>f</sup>                                     | 0.07   | 0.21 | 0.52 | 0.85 | 0.96 | 0.95 | 0.66 | 0.67 | 0.63 | 0.48 | 0.19 | 0.06 |                             |                                 |        |
| 20% Exceedance <sup>l</sup>                                           | mm/day |      |      |      |      |      |      |      |      |      |      |      | mm                          |                                 |        |
| Monthly <sup>c</sup>                                                  | 0.25   | 0.70 | 1.93 | 3.28 | 4.10 | 4.92 | 5.28 | 4.66 | 3.02 | 1.63 | 0.56 | 0.21 | 895                         | 0                               | 895    |
| 15-Day Moving Average <sup>d</sup>                                    | 0.31   | 0.78 | 2.31 | 3.68 | 4.86 | 5.35 | 5.60 | 5.02 | 3.36 | 1.97 | 0.70 | 0.24 |                             |                                 |        |
| 7-Day Moving Average <sup>e</sup>                                     | 0.35   | 1.00 | 2.62 | 4.23 | 5.23 | 5.71 | 5.83 | 5.36 | 3.64 | 2.36 | 0.83 | 0.27 |                             |                                 |        |
| 3-Day Moving Average <sup>f</sup>                                     | 0.39   | 1.18 | 3.08 | 4.83 | 5.67 | 6.21 | 6.20 | 5.60 | 4.08 | 2.60 | 0.96 | 0.36 |                             |                                 |        |
|                                                                       |        |      |      |      |      |      |      |      |      |      |      |      |                             |                                 |        |

PHOTOGRAPHER AND DATE OF PHOTOS: Sandy Thiel, October 3, 2012 (September 12, 2012)  
FILE NUMBER 75-7634



Water seeps into the Magic Ditch and flows to the north. This photo shows the ditch looking south



Unnamed drain looking south

The combined water from McNutt, Big Flat and Magic Ditch flows into the unnamed ditch from the south



Pond inlet

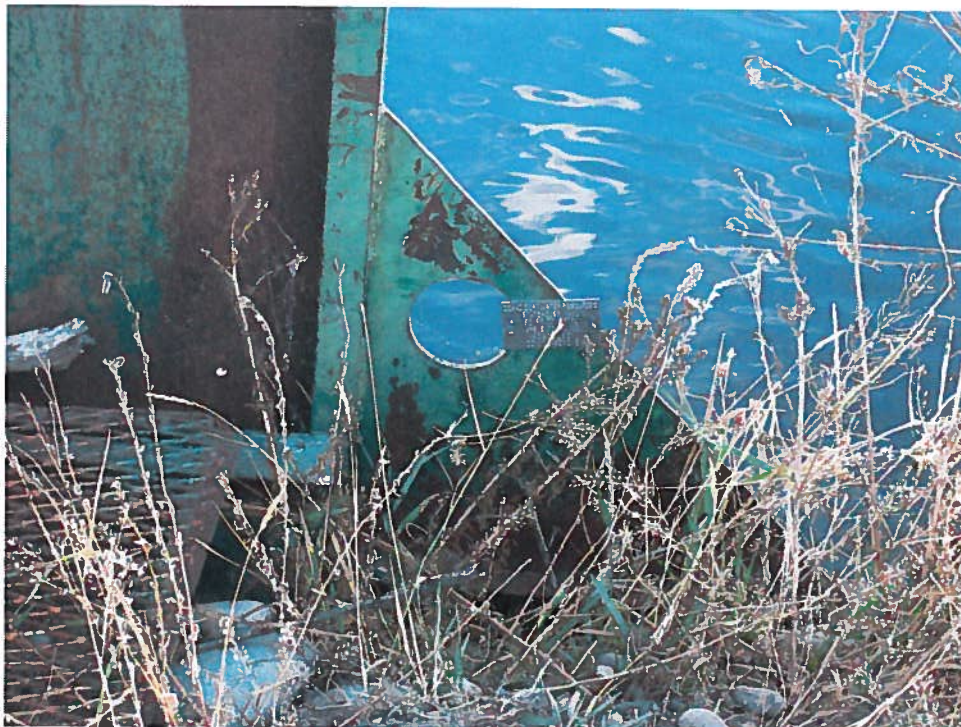
Headgate for water leaving the pond



Headgate  
and culvert



Headgate looking east, southeast



Tag: A0019120



Water flowing out of the pond to the west