

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 21-7540

Exam Date: 6/18/2013

1. Current Owner: JOHN J ELMORE
PO BOX 156
BRAWLEY CA 92227-0156
(619)344-4250
2. Accompanied by: John Hall
Phone No: 208-390-3859
Address: 226 Fort Henry Loop Rexburg ID, 83440
Relationship to Permit Holder: Property Manager

3. SOURCE

WARM SLOUGH

TRIBUTARY

HENRYS FORK

B. OVERLAP REVIEW

1. Other water rights with the same place of use: None
2. Other water rights with the same point of diversion: None

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

WARM SLOUGH

NE1/4SW1/4

Sec. 27, Twp 07N, Rge 39E, B.M.

MADISON County

Method of Determination: Aerial photography

2.

PLACE OF USE: RECREATION 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>	
07N 39E 27									X	X	X	X					
07N 39E 34					X												

PLACE OF USE: RECREATION

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>	
07N 39E 27									X	X	X	X					
07N 39E 34					X												

Method of Determination: Aerial Photography

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.

<u>Well or Diversion</u> <u>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</u> <u>Size</u>
	GE	10	23052190		

D. FLOW MEASUREMENTS

1.

<u>Measurement</u> <u>Equipment</u>	<u>Type</u>	<u>Make</u>	<u>Model No.</u>	<u>Serial No.</u>	<u>Size</u>	<u>Calib. Date</u>
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2. Measurements:

E. FLOW CALCULATIONS

____ Additional Computation Sheets Attached

Measured Method:

Unable to use portable flow meter to measure water diverted from Warm Slough. The water level in Warm Slough is significantly low causing air to be in the pipeline. Using the Theoretical the rate of diversion equals 3.85 cfs.

Theoretical:

$$Q = \frac{8.8 \times 0.7 (\text{assumption}) \times 10}{16\text{ft} + (2.31 \times 0)}$$

$$Q = 3.85 \text{ cfs}$$

Flow rate measurements were also taken at the two headgates where the water discharges into the Henrys Fork. Using the suppressed weir equation the total discharge rate of diversion from the two headgates (northern headgate and southern headgate) equals 2.72 cfs.

Suppressed weir equation for northern headgate:

$$Q = 3.33 \times 3.0\text{ft} \times 0.25\text{ft}^{1.5}$$

$$Q = 1.25 \text{ cfs}$$

Suppressed weir equation for southern headgate:

$$Q = 3.33 \times 3.5\text{ft} \times 0.10\text{ft}^{1.5} \times 4$$

$$Q = 1.47 \text{ cfs}$$

$$1.25\text{cfs} + 1.47\text{cfs} = 2.72 \text{ cfs}$$

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

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

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

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

2. Volume Calculations for Other Uses:

$$\text{Recreation} = 2.3 \times 1.9835 \times 365 \text{ days} = 1665.1 \text{ acre-feet}$$

Recreation Storage= 90.0 acre-feet. Surface area of pond =13.5 acres. Pond depths range from 2.0 ft to 18.0 ft.

G. NARRATIVE/REMARKS/COMMENTS

Water from Warm Slough is diverted via 10 hp pump through 10 inch mainline into a series of ponds. Water is diverted year round through the ponds. One pond is stocked with fish. Total surface area of the ponds is approximately 13.5 acres with depths ranging anywhere from 2.0 feet to 18.0 feet. Point of diversion can be locked at power box. Measurements can be taken at the two discharge diversions or at the point of diversion using PCC.

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>
DIVERSION TO STORAGE	05/01 to 08/01	2.300 CFS	90.00 AF
RECREATION STORAGE	01/01 to 12/31		90.00 AF
RECREATION	01/01 to 12/31	2.300 CFS	1665.1 AF
<u>Totals:</u>		2.300 CFS	1665.1 AF

2. Recommended Amendments

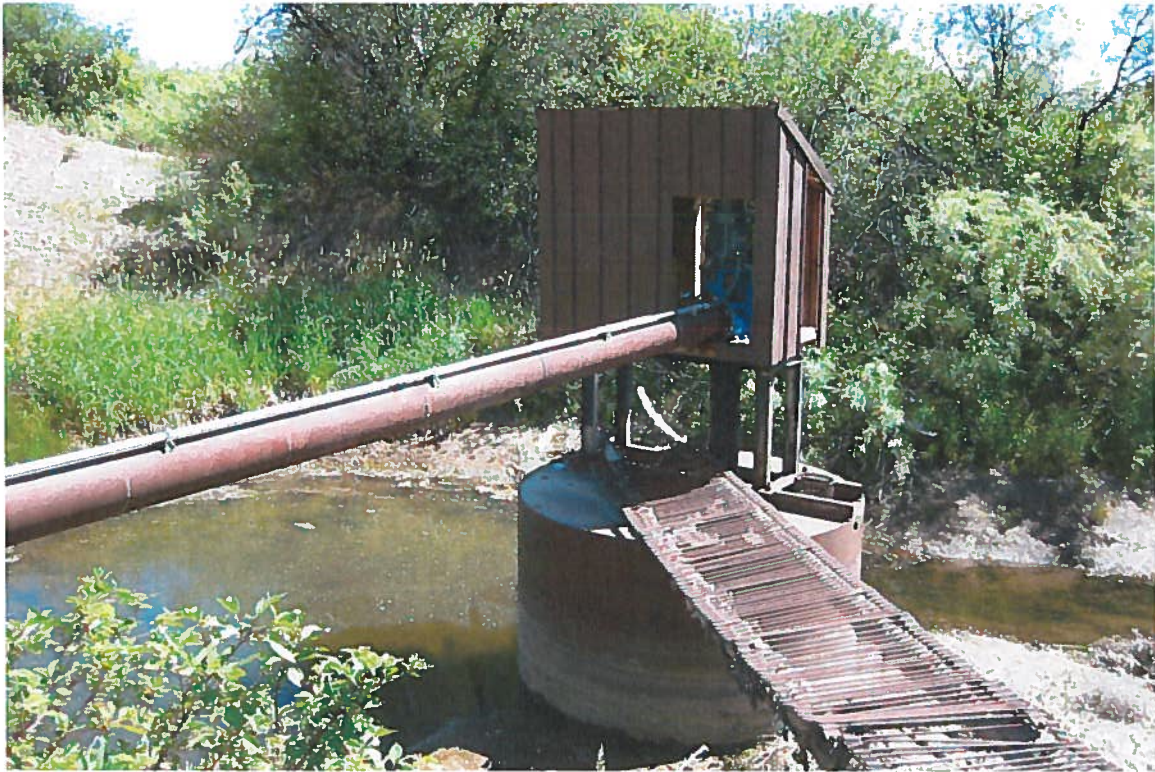
☐ Change P.D. as reflected above ☐ Add P.D. as reflected above ☐ None

☐ Change P.U. as reflected above ☒ Add P.U. as reflected above ☐ Other

I. AUTHENTICATION

Field Examiner's Name  Date 6/18/2013

Reviewer James Cefalo Date 7/17/2013

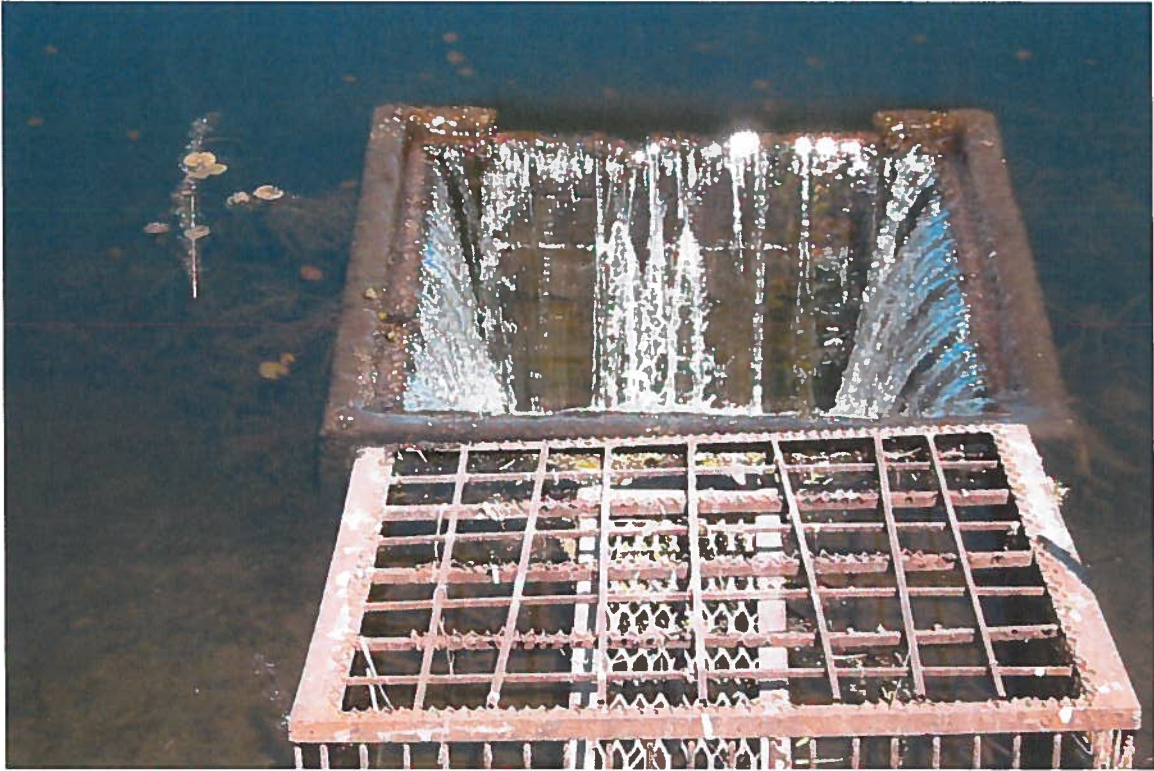


Point of Diversion



Discharge Diversion into Henrys Fork (Northern Diversion)

- Length of crest = 3 ft
- Head = 0.25 ft



Discharge Diversion into Henrys Fork (Southern Diversion)

Length of Crests = ~~an~~ 3.5 ft x 4
head = ~ 0.1 ft



Diversion into series of ponds

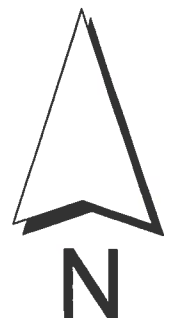


0 250 500 1,000 Feet

1 inch = 437.95 feet

Legend

- POD
- Discharge points
- Pipeline
- POU
- Township/Range
- Sections
- QQ



Water Right 21-7540