

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

**A. GENERAL INFORMATION**

Permit No: 13-7912

Exam Date: 7/10/2015

1. Current Owner: VARLEY FARMS INC  
995 RIVER ROAD  
GRACE ID 83241  
(208)425-3576

2. Accompanied by: N/A

3. SOURCE  
SPRING

TRIBUTARY  
BEAR RIVER

**B. OVERLAP REVIEW**

- Other water rights with the same place of use: None.
- Other water rights with the same point of diversion: None. Claim 13-4336 (PacifiCorp) is from a nearby spring.

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

SPRING SW1/4NE1/4NW1/4 Sec. 21, Twp 10S, Rge 40E, B.M. CARIBOU County

Method of Determination: Site visit.

2.

PLACE OF USE: FISH PROPAGATION / RECREATION STORAGE / WILDLIFE 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 |        |
| 10S | 40E | 21  |    |    |    |    |    |    |    | X  |    |    |    |    |    |    |    |    |        |

Method of Determination: Aerial photos and site visit.

**D. FLOW MEASUREMENTS**

Measurement not required according to beneficial use field exam rules (IDAPA 37.03.02.035.01.r). 4-inch plastic pipeline from spring to pond. Theoretical calculations (Hazen Williams equation, 10 foot elevation loss over 80 feet of pipe) show that the 4-inch pipe could only carry 0.03 cfs in the absence of pressurization. Pipe narrows to a 1 inch pipe with shutoff valve at the pond. At the time of the exam, flow out of pipeline was only a trickle because the valve was not fully open. License will be issued for 0.03 cfs. Spring flow exceeds 0.03 cfs.

**E. VOLUME CALCULATIONS**

Pond size: 0.3 acres x 5.0 feet (average depth of pond) = 1.5 acre-feet.

Annual evaporation from pond = 0.4 acre-feet (ET Idaho data provided with application for permit)

Total volume associated with pond (wildlife storage and recreation storage)= 1.9 acre-feet

Fish Propagation Volume (non-consumptive) = 0.03 cfs x 365 days x 1.9835 = 21.7 acre-feet

**F. NARRATIVE/REMARKS/COMMENTS**

A pipe diverts spring water into the pond. Outlet channel from the pond joins the remaining spring water and flows west into the Bear River. Permit stated that the spring is tributary to sinks. Spring flow was significant at the time of the field exam. Water was easily reaching the Bear River. The consumptive element of the right (diversion to storage) must be limited to 2,500 gallons per day. The non-consumptive element (fish propagation) does not carry a daily volume limitation.

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

**G. RECOMMENDATIONS****1. Recommended Amounts**

| <u>BENEFICIAL USE</u> | <u>PERIOD OF USE</u> | <u>DIVERSION RATE</u> | <u>ANNUAL VOLUME</u> |
|-----------------------|----------------------|-----------------------|----------------------|
| FISH PROPAGATION      | 01/01 to 12/31       | 0.030 CFS             | 21.7 AF              |
| RECREATION STORAGE    | 01/01 to 12/31       |                       | 1.9 AF               |
| WILDLIFE STORAGE      | 01/01 to 12/31       |                       | 1.9 AF               |
| DIVERSION TO STORAGE  | 01/01 to 12/31       | 0.030 CFS             |                      |
|                       | <u>Totals:</u>       | 0.030 CFS             | 23.6 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

**H. AUTHENTICATION**

Field Examiner's Name James Cefalo Date 8/19/15

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



Pipeline into pond.



Pond outlet at northeast corner



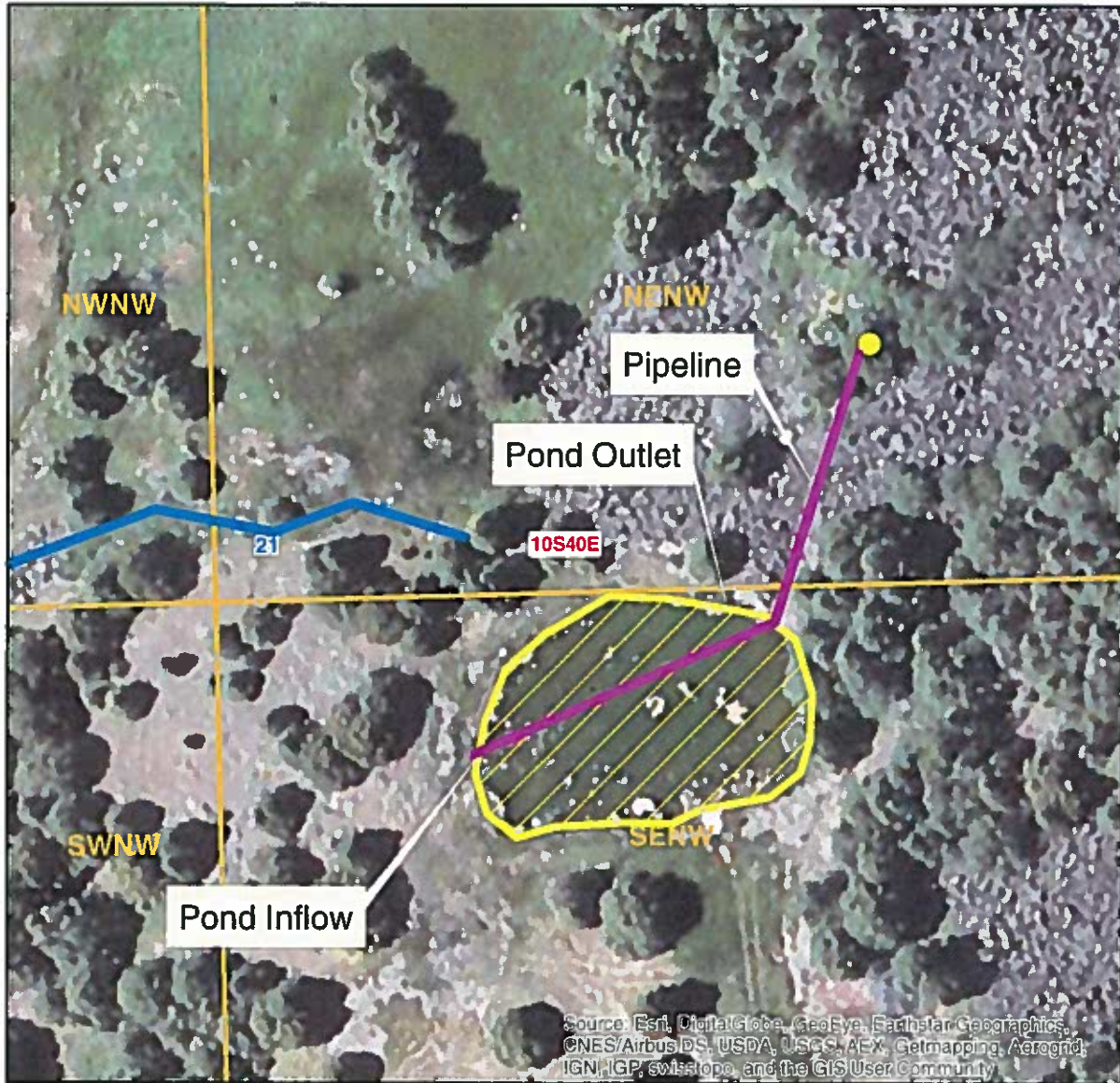
4-inch pipeline from spring to pond.



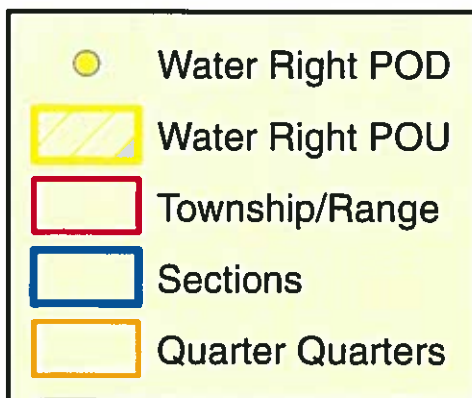
Spring channel below pond area.



## Water Right 13-7912



2010 Aerial Photo



0 50 100 Feet

