

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 37-8916
Exam Date: 05/30/2019

1. Current Owner:
TOM R NORRIS 2521 BROADWAY ST SAN FRANCISCO CA 94115-1113
2. Accompanied by: Zachery Latham
Phone No: (208) 736-8543
Address: Brockway Engineering, PLLC 2016 Washington St. North, Suite 4 Twin Falls, ID 83301
Relationship to permit Holder: Representative

3. **SOURCE:**
BIG WOOD RIVER

Tributary
MALAD RIVER

Method of Determination: On-Site Inspection

B. OVERLAP REVIEW

1. Other water rights with the same place of use: **None**

Comments: This permit is associated with an on-stream pond with no known existing water right. The pond is filled with water conveyed through a channel that has no diversion works; the pond is replenished only when the Big Wood River has adequate flows.

2. Other water rights with the same point-of-diversion: **None**

C. DIVERSION AND DELIVERY SYSTEM1. **LOCATION OF POINT(S) OF DIVERSION:**

BIG WOOD RIVER NE¼ SE¼, Sec. 7, Twp 03N, Rge 18E, B.M. BLAINE County

Method of Determination: On-Site Inspection

PLACE OF USE: AESTHETIC STORAGE

Twp	Rng	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
03N	18E	7													X				

3. Delivery System Diagram Attached (required). Indicate all major components and distances between components.
 X 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.
 X
- X Aerial Photo Attached (required for irrigation of 10+ acres).
- X Photo of Diversion and System Attached

D. FLOW MEASUREMENTS

2. Measurements: No measurements were taken: water only flows naturally through the conveyance channel when there are adequate flows in the Big Wood River. There was no observable flow in the channel during the field exam.

E. VOLUME CALCULATIONS

1. Volume Calculations for irrigation: No irrigation associated with the aesthetic pond.

2. Volume Calculations for Other Uses: Aesthetic Storage-pond expansion is .09 acres
average depth = 3.5 feet. $(0.09 \text{ acres} \times 3.5 \text{ feet} = .32 \text{ acre-feet per year})$.

Evaporative losses = 1.26 feet per year $(1.26 \text{ feet/year} \times .09 \text{ acres} = 0.11 \text{ acre-feet per year})$

Total Volume = **.43 acre-feet** (.32 acre-feet + .11 acre-feet)

F. NARRATIVE/REMARKS/COMMENTS

On May 30, 2019 Corey Skinner and I performed a field exam for Water Permit 37-08916. We performed the field exam on property located at 104 West Channel Lane (Lot 2B) in the Little Makawao Subdivision which is located northeast of the Highway 75 and East Fork Road intersection approximately 5.2 miles south and 0.8 miles east of the center of Ketchum.

The application for permit proposes to enlarge an existing 0.48 acre aesthetic pond by 0.09 acres. The enlarged portion of the pond will have annual evaporative losses of 0.11 acre-feet per year that will be mitigated by reducing the irrigation of domestic water right 37-22847 from 0.5 acres to 0.44 acres.

No diversion works are used for filling the 0.09 acre addition. Filling the pond is accomplished simply by equilibrium; the addition is dug to the same 3.5 feet of depth as the existing 0.48 acre pond.

Conditions of the permit have been met and I recommend licensing 37-8916 for a volume of 0.43 acre feet which includes .32 acre-feet for the pond volume plus .11 acre-feet for evaporative losses.

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

G. RECOMMENDATIONS**1. Recommended Amounts**

<u>Beneficial Use</u>	<u>Period of Use</u>	<u>Rate of Diversion</u>	<u>Annual Volume</u>
AESTHETIC STORAGE	01/01 to 12/31		0.4 AF

Totals:

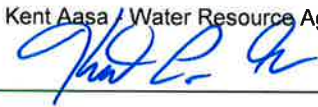
0.4 AF

2. Recommended Amendments

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

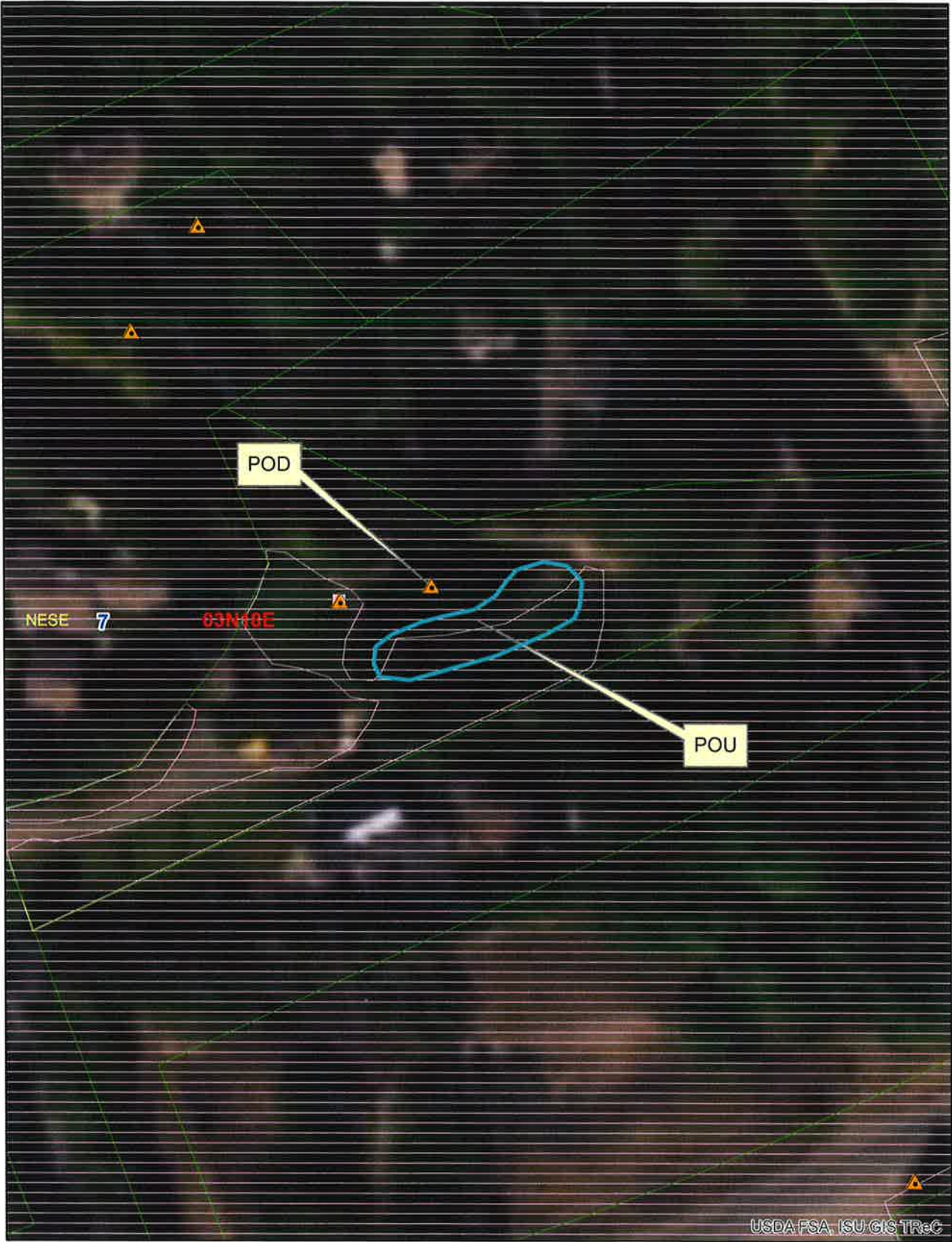
☐ Change P.U. as reflected above ☐ Add P.U. as reflected above ☒ None

H. AUTHENTICATION Kent Aasa / Water Resource Agent

Field Examiner's Name  Date 06/20/2019

Reviewer _____ Date _____

37-8916 POD_POU

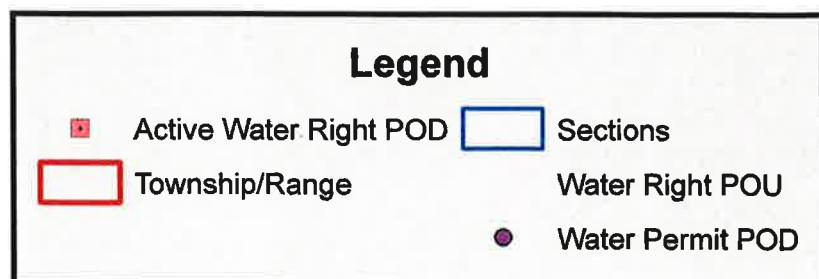


Legend

	Water Right POD		Sections	Water Right POU
	Township/Range		QQ	



37-8916_System Diagram



37-08916 POU

POU looking East

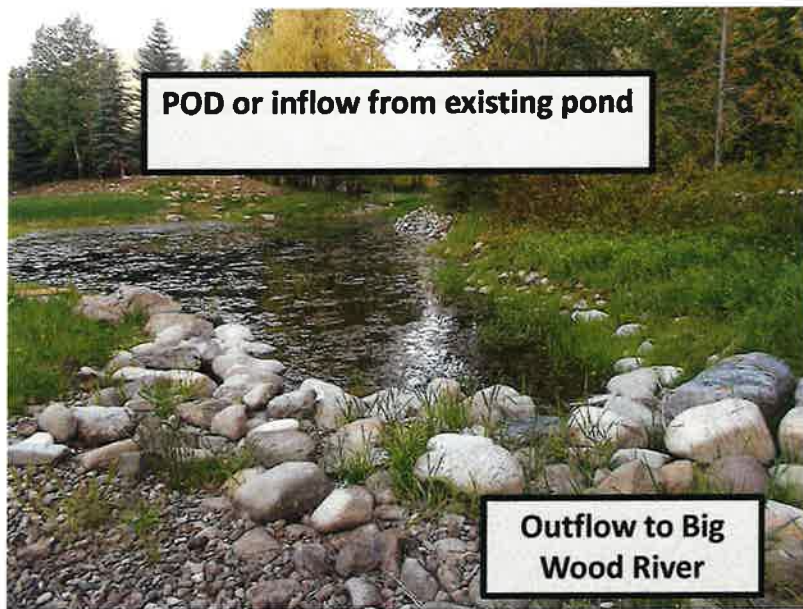


POU looking West



37-08916 POU and POD

Enlarged portion of the pond 37-08916



POD and Aesthetic Storage



University of Idaho ET IDAHO 2017 Pdef

Mitigation calculations

Annual evaporation from shallow open water

$$P_{def}(2017) = 364 \text{ mm/year}$$

Pond Area = .09 acres

$$364 / 304.8 = 1.19$$

$$1.19 \times .09 = .107 \text{ or } .11 \text{ AFA}$$

$$P_{def}(2017) \text{ for Turf} = 573 \text{ mm/year}$$

$$573 / 304.8 = 1.879 \text{ or } 1.88 \text{ AFA}$$

Mitigation is from domestic 37-22847 (.5 acre irrigation)

$$1.88 \text{ AFA} \times .5 \text{ acres} = 0.94 \text{ AF}$$

$$.11 / .94 = 11.7 \% \rightarrow 11.7 \% = .117$$

$$.117 \times .5 = .0585 \rightarrow .06 \text{ acres}$$

* .06 acres of irrigation from 37-22847 are used to mitigate evaporative losses for 37-8916