

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 94-9637

Exam Date: 08/14/2025

1. Current Owner:

RANDE ALVIN WARNER 23090 E DOYLE RD CATALDO ID 83810-9479 AND/OR
DEBRA JANE WARNER 23090 E DOYLE RD CATALDO ID 83810-9479

2. Accompanied by: Rande Warner

Phone No: 360-815-7947

Address: Same as above

Relationship to permit Holder: Permit Holder

3. **SOURCE:**

ROSE LAKE

Tributary

COEUR D ALENE RIVER

Method of Determination: ArcMap and DRG Layer.**B. OVERLAP REVIEW**

1. Other water rights with the same place of use:

YES Overlap

Water Right No.	Source	Purpose of Use	Basis
94-7367	GROUND WATER	MUNICIPAL	DECREED
94-8176	SPRING	STOCKWATER	DECREED

Comments: Decreed Right 94-7367 is associated with a municipal service area which uses a Ground Water source distribution system; the Permit Holder's parcel is within the municipal service area, and the primary residence is served by the municipal system, but no irrigation water is served to the parcel by the municipal system. Due to this Permit's irrigation system being the sole water source/system distributing irrigation water to the Permit's POU, there is no concern for overlap between the municipal Right and this Permit.

Decreed Right 94-8176 authorizes spring water use for stockwater purposes on the same parcel as this Permit's stockwater POU. The spring source water system and this Permit's stockwater system both serve the same stock animals owned by the Permit holder resulting in direct overlap between Rights toward the stockwater beneficial use; I have recommended adding condition X35 to the Permit during licensing review to annotate that when combined 94-8176 and 94-9637 shall not exceed stockwater use for 15 head of mixed stock.

2. Other water rights with the same point-of-diversion:

NO Overlap

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

ROSE LAKE L4 (SW¼ NW¼), Sec. 33, Twp 49N, Rge 01W, B.M. KOOTENAI County

Method of Determination: GPS. POD is located at -116°28.6537, 47°33.1389 at lake front with intake and submersible pump out in the lake.

PLACE OF USE: IRRIGATION

Twp	Rng	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
49N	01W	33							10.0										10.0

Total Acres: 10.0

PLACE OF USE: STOCKWATER

Twp	Rng	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
49N	01W	33							X L4										

Method of Determination: beneficial use field examination and ArcMap aerial imagery.

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

4.

Well or Diversion ID No.*	Motor Make	Hp	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size
Lake Pump	Altivar VFD relay control panel	7.5	15 hp relay control panel used with larger 10 hp motor end paired with 7.5 hp Goulds Pump end	Goulds	2-inch discharge

D. FLOW MEASUREMENTS

1.

Measurement Equipment	Type	Make	Model No.	Serial No.	Size	Calib. Date
System installed Flow Meter	Flanged velocity style	Badger Meter	Recordall model	92836651	2-inch	Unknown

2. Measurements: I used the system installed Badger Meter to evaluate multiple one-minute interval flow measurements with All of the water two of the three irrigation risers cycled on to garden hoses and the big wheel irrigation riser in operation to ensure maximum diversion rate for the water system was observed. I recorded a maximum diversion rate of 115 gpm using a stopwatch to time rotations on the flowmeter. 115 gpm equals 0.26 cfs considering Department rounding standards.

E. FLOW CALCULATIONS

Measured Method: water system installed in-line flanged velocity style flow meter:

- Permit authorized diversion rate = 0.20 cfs Maximum Diversion Rate based on Department standard rate for 10.0 acres and 0.01 cfs stockwater covered by the maximum rate.
- Flow meter evaluated average flow rate = 115 gpm or 0.26 cfs considering Department rounding standards.
- Recommended Maximum diversion rate for licensing purposes = **0.20 cfs**.
 - Total irrigated acreage validated during field exam and license review = 10 acres, and the Department authorizes 0.02 cfs per acre = 0.02 cfs x 10.0 ac = 0.20 cfs.
 - Stockwater use diversion rate – 0.02 cfs based on 15 head stock validated during the field exam.
- The 7.5 hp pump can exceed 90-gpm or 0.20 cfs maximum diversion rate limited by permit authorized rates but the flow measurement was taken with all three irrigation risers in operation whereas normal irrigation practices use two out of three risers to irrigate at any given time. This mitigates concerns for enlargement coupled with a flowmeter

being installed to assist the Permit Holder ensure the system is operating within the maximum diversion rate of 0.20 cfs (90 gpm).

F. VOLUME CALCULATIONS

1. Volume Calculations for irrigation:

$$V_{I.R} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 10.0 \text{ ac} \times 3.0 \text{ afa} = 30.0 \text{ af}$$

$$V_{D.R} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.20 \text{ cfs} \times 231 \text{ days} \times 1.9835 = 91.6 \text{ af}$$

$$V = \text{Smaller of } V_{I.R} \text{ and } V_{D.R} = \mathbf{30.0 \text{ af}}$$

2. Volume Calculations for Other Uses:

$$\text{Stockwater annual volume} = (2 \text{ draft horses and } 5 \text{ head cattle}) \times 12 \text{ gpd} \times 365 \text{ day} = \mathbf{30,660 \text{ gals}} \text{ annually} +$$

$$10 \text{ goats} \times 2 \text{ gpd} \times 365 \text{ days} = \mathbf{7,300 \text{ gals}} \text{ annually} =$$

$$37,960 \text{ gal annually} / 325,850 \text{ gal per af} = \mathbf{0.1 \text{ af}}$$
 considering Department rounding standards.

G. NARRATIVE/REMARKS/COMMENTS

I conducted the beneficial use (BU) field exam on 8/14/2025 with the Permit Holder, Rande Warner, which showed Rose Lake water being diverted for irrigation and stockwater uses. At the POD, a 7.5 hp submersible pump with 2-inch poly pipe intake line are positioned in Rose Lake, and at shoreline have been trenched to run buried the remainder of the water conveyance system. A dry-well portal was installed about 20 feet from the shoreline which houses diverting pump conduit, a hose bib riser, an in-line flanged style flow meter, and pressure gauge. A post with relay control panel is co-located with the dry-well.

During the exam I had Mr. Warner turn on three (3) irrigation risers to ensure the diverting pump was operating at maximum capacity. I captured flow measurements from the system installed flowmeter which demonstrated the pump capacity produces 115 gpm; this is supported by performance pump curve data provided by Mr. Warner with submission of the Statement of Completion form which illustrates 117 USgpm capacity. I have recommended the diversion rate of 0.20 cfs for irrigation use, 0.02 cfs for stockwater use, and a maximum diversion rate equal to **0.20 cfs** for licensing purposes. Both BUs diversion rates are based on department standards evaluated following the field exam. While the diverting system was observed at 115 gpm during the exam, normal irrigation practices by the Permit Holder don't incorporate all three irrigation risers so the flow becomes restricted to 2 or less at one time which reduces the normal operating diversion rate and serves to mitigate concern of enlargement by diversion rate.

The water conveyance system uses 2-inch polypipe from intake to just past the flowmeter installed in dry well, then the main pipeline is coupled up to a 4-inch buried distribution pipeline with 3ea 2-inch irrigation riser pipes. The lower 2 risers use a hose splitter attachment that allow 100-ft hose runs and sprinklers to the irrigation POU for garden, lawn, and landscape watering in addition to portable stock tank use for goats as needed. The last irrigation riser in distribution is dedicated to a 2-inch hose connection to big wheel irrigation sprinkler for pasture watering.

During the field exam I took photographs of the water system components and irrigation & stockwater POU while using field maps to sketch the water system and POU(s). During licensing review, I used ArcMap aerial imagery to accurately trace out the irrigation POU, while the stockwater POU was kept generic or same as irrigation POU based on the Permit Holder's use of portable stock takes for horses/cattle/goats.

The irrigation Pou evaluated during the field exam equals 10.0 acres, and the big wheel gun provides irrigation of a large pasture; during the exam the big wheel was irrigating the SW corner of the POU, and the spray arc was extending into the tree line which supports the POU including some tree canopy area of the parcel. The lower two irrigation risers use hose bib splitters to multiple hose segments that water two large, fenced gardens and large lawn space between the residence and lake frontage. Mr. Wagner capitalizes on the sloped topography and includes flood irrigation to water lawn space in addition to tripod sprinklers. The annual volume recommended for irrigation equals 10 ac x 3.0 afa = **30 af** for licensing purposes.

The Stockwater POU includes a large fence pasture primarily used for stock horses, goats, and cattle rotationally. During the exam only stock horses were present, but the goats and cattle were actively watered during the development period of the Permit, and I've recommended inclusion of 2 horses, 10 goats, and 5 head cattle toward making licensing recommendations. The stockwater annual volume rounds to **0.1 af** considering Department rounding standards. When added to the irrigation volume the maximum diversion volume assigned to the license recommendation equals **30.1 af**.

I removed conditions 26A and X02 during licensing review. I added condition X35 based on overlapping water rights discussed on PG1 of this report. All other conditions on the Permit shall be carried forward to the license. The Permit Holder's primary residence is served water by Rose Lake Water Assn's municipal services, but no external water use is delivered by the municipal provider which deconflicts overlap concerns between the two separate systems. Aside from overlapping water right concerns discussed on PG1 of this report, there are no other overlapping concerns toward licensing 94-9637.

Have conditions of permit approval been met? X Yes No

H. RECOMMENDATIONS

1. Recommended Amounts

<u>Beneficial Use</u>	<u>Period of Use</u>	<u>Rate of Diversion</u>	<u>Annual Volume</u>
IRRIGATION	03/15 to 10/31	0.20 CFS	30.0 AF
STOCKWATER	01/01 to 12/31	0.02 CFS	0.1 AF

Totals: 0.20 CFS 30.1 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 X None

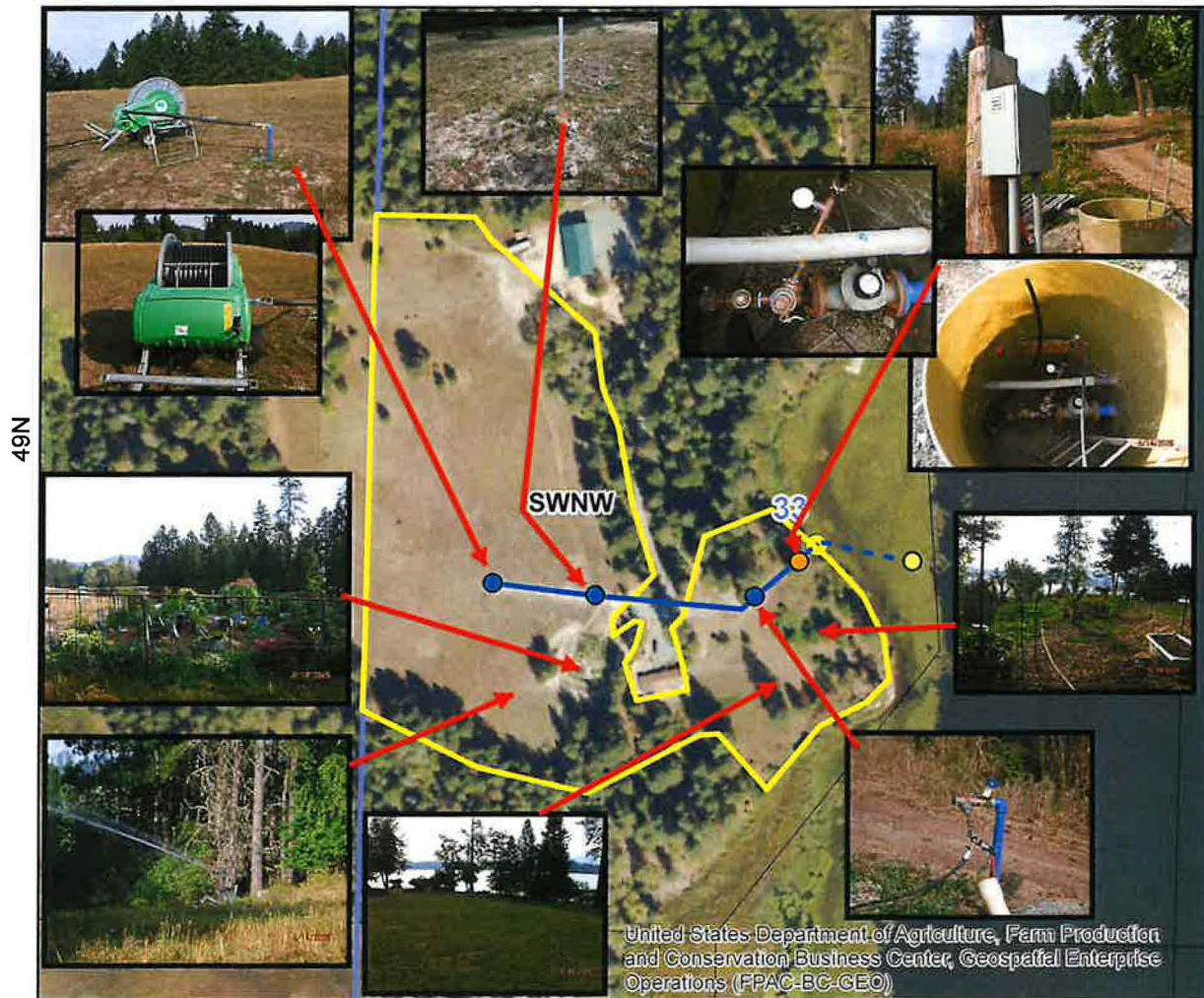
I. AUTHENTICATION Luke Bates – Sr Water Resource Agent

Field Examiner's Name *LB* Date 11/17/2025
 Reviewer *Michelle Richman* Date 8/10/26

State of Idaho
Department of Water Resources
Attachment to Field Exam
94-9637

This map depicts the IRRIGATION and STOCKWATER system diagram.

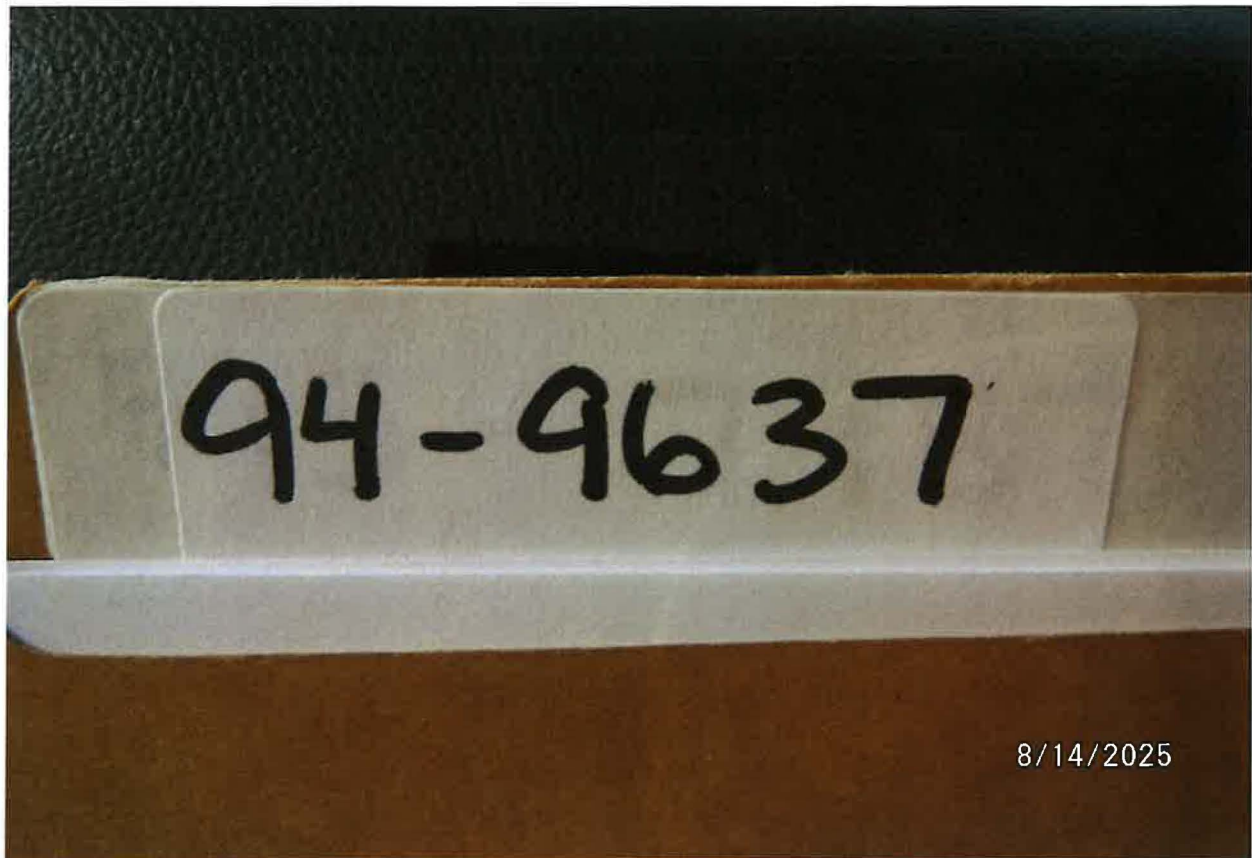
01W



0 0.035 0.07 0.14 Miles

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





BENEFICIAL USE FIELD EXAM DATE 8/14/2025



POD – SUBMERSIBLE 7.5 HP GOULDS PUMP IN ROSE LAKE (THIN BOUEY IN CENTER PORTION OF PHOTOGRAPH)



2-INCH INTAKE PIPE COMES TO SHORE AS A BURIED PIPELINE (SEE R/H SIDE OF IMAGE 2-INCH POLYPIPE ROUTED IN CORRUGATED SHIELDING PIPE)



WATER CONVEYANCE SYSTEM – PUMP MOTOR CONTROL PANEL AND SEMI-VAULTED VALVE CONTROLS WITH FLOW METER



ALTIVAR 320 PUMP MOTOR RELAY CONTROL PANEL – CAPABLE TO PAIR WITH UP TO 15 HP PUMP END. SYSTEM USES A 7.5 HP PUMP END.



WATER SYSTEM INCLUDES AN INSTALLED FLOW METER AND CHANGES FROM 2-INCH INTAKE PIPELINE TO 4-INCH BURIED MAIN WATER LINE ROUTED TO IRRIGATION POU



BADGER METER – RECORDALL FLANGED VELOCITY STYLE FLOW METER S/N 92836651 INSTALLED PRIOR TO FIRST IRRIGATION RISER





WATER SYSTEM OPERATES AT 110 PSI WITH ALL IRRIGATION RISERS IN OPERATION (NOT NORMAL); NORMAL OPERATION USES A SINGLE SPRINKLER ON AT A TIME



WATER CONVEYANCE SYSTEM INCLUDES BURIED 4-INCH MAIN LINE WITH 2-INCH IRRIGATION RISER TO HOSE BIB OR 1-INCH BIG WHEEL IRRIGATION SPRINKLER



IRRIGATION POU – GARDEN SPACE WATERED BY HOSE AND SPRINKLER





IRRIGATION POU



LARGE OPEN LAWN SPACE BETWEEN RESIDENCE AND LAKE WATERED BY BIG WHEEL SPRINKLER



IRRIGATION POU – UPPER FIELD WITH IRRIGATION RISER PIPE



WATER LINE VALVE CONTROL PIPE



IRRIGATION POU – LAST IRRIGATION RISER PIPE CONNECTED TO BIG WHEEL
SPRINKLER





IRRIGATION POU – BIG WHEEL STOCK FIELD WATERED FOR FEED





IRRIGATION POU



IRRIGATION POU – LAWN SPACE AROUND RESIDENCE



IRRIGATION POU



IRRIGATION POU – UPPER FIELD LARGE FENCED GARDEN SPACE



IRRIGATION POU





STOCKWATER POU – HORSES, CATTLE, AND GOATS ROTATED ON FIELD
THROUGHOUT SEASON OF USE WITH WATER TO PORTABLE STOCK TANKS