

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 87-10938
Exam Date: 04/24/2025

1. Current Owner:
WILLIAM E BIRD 2508 HIGHWAY 9 PRINCETON ID 83857-9723 AND/OR
VICKI J WADE 2508 HIGHWAY 9 PRINCETON ID 83857-9723
2. Accompanied by: William Bird
Phone No: 208-669-2142
Address: Same as above
Relationship to permit Holder: Permit Holder

3. **SOURCE:**
SPRING

Tributary
SINKS

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
87-11123	GROUND WATER	STOCKWATER, DOMESTIC	DECREED

Comments: 87-11123 was Decreed in the PRBA authorizing domestic use and stockwater use with a maximum diversion rate of 0.05 cfs but no volume recorded on the face of the decree. There are conditions of approval that annotate stockwater use is for 40 head of cattle, horses, chickens and pigs, and the quantity of water which shall not exceed 13,000 gpd. 87-11123 has an overlapping POU and water use associated with the stockwater use, specifically stockwater storage use for this Permit. Permit 87-10938 is being recommended with a stockwater storage diversion volume equaling 0.6 af for 45 head of cattle/horses.

Since both 87-11123 and 87-10938 have stockwater related beneficial uses which specifically designate the total number of stock, 50 head and 45 head respectively, I am recommending addition of condition X35 for licensing purposes which describes that both Rights when combined shall not exceed stockwater use for 50 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:**

SPRING NW¼ NW¼ NW¼, Sec. 28, Twp 41N, Rge 03W, B.M. LATAH County

Method of Determination: In-pond source, pond excavated to capture a spring source. I used Arcmap software to assign the Permit POD as the License POD.

PLACE OF USE: STOCKWATER STORAGE and RECREATION 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	
41N	03W	28						X											
41N	03W	21											X						

Method of Determination: Beneficial use field exam and ArcMap aerial imagery.

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.

Well or Diversion ID No.*	Motor Make	Hp	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size
EARTHEN POND DAM					

D. FLOW MEASUREMENTS

1.

Measurement Equipment	Type	Make	Model No.	Serial No.	Size	Calib. Date
NONE						

2. Measurements: None

E. FLOW CALCULATIONS

Measured Method: N/A

F. VOLUME CALCULATIONS

1. Volume Calculations for irrigation: N/A

2. Volume Calculations for Other Uses: See attached pond analysis worksheet.

- Stockwater Storage annual volume = 45 head mixed stock x 12-gpd x 365-days = 197,100-gal / 325,850-gal/af = 0.6 af considering department rounding standards.

G. NARRATIVE/REMARKS/COMMENTS

I conducted the beneficial use field examination on 4/24/2025 with the Permit Holder, Mr. William "Bill" Bird, which showed an excavated storage pond impounding spring source water for stock water and recreation storage uses. The POD for the spring source is located within the storage pond that resides in a minor depression with earthen dam constructed in an arc along the western extent of the pond. I couldn't confirm the exact location of the spring daylight and with the storage pond falling within two separate QQ/Qs, I have designated the POD using the Permit approval centroid which is located in the NW1/4NW1/4. Since the pond has been excavated, it has always held water indicating that the spring source is sufficient to maintain pond storage even during late summer months.

The storage pond POU was overfull due to the early season exam time, with spring runoff contributing to some impoundment of water outside the normal high-water level for the excavated pond on the eastern reach of the pond. During licensing review, I created my field exam map that illustrates the area impacted by snowmelt and seasonal surface runoff. This portion of the concave topography appeared to be about ½ - 1 ft deep and according to Mr. Bird once spring runoff is over, he puts fencing back up on the eastern reach of the normal pond high water mark to keep stock from eroding the pond bank. A small, fenced area is troughed into the pond from the eastern portion to allow stock to drink directly from the pond without fully accessing the earthen pond dike/dam.

During licensing review, ArcMap aerial imagery coupled with field exam notes were used to trace out the POU shape for the pond's surface area, with size & volume factors detailed below:

- The pond has a maximum depth of 12 feet, an average depth of 4.8 ft, a pond capacity of 2.0 af, and an estimated seepage & evaporation loss of 0.8 af. Based on pond development and current pond analysis worksheet calculations, the Recreational Storage beneficial use annual volume equals **2.8 af**.
- The Stockwater Storage beneficial volume was designated separately from recreation storage on the Permit, and I recommend licensing with its own volume separate from the volume associated with recreation storage. **0.6 af** as calculated above is authorized for stock to consume directly from the pond, making the maximum diversion volume for licensing purposes equal to **3.4 af**.

Mr. Bird asserts that no pumping from the pond was developed under irrigation or stockwater use within the Permit's development period, and I've removed the following beneficial uses from the Permit during licensing review: Irrigation Storage, Irrigation from Storage, and Stockwater from Storage.

Conditions 26A, X02, R58, & 220 were removed from the permit during licensing review. 220 was removed based on licensing guidance from Shelley Keen – IDWR Deputy Director. A text condition describing Recreation Storage water use was removed from the permit as the description is not required for licensing purposes. Condition 259 was replaced with 219 accurately describing a storage pond without multiple fill requirements reflecting the pond analysis worksheet calculated during licensing review. I have added condition X35 as described on PG1 of this report describing combined stockwater uses between Rights 87-11123 & 87-10938. There are no additional overlapping water right concerns toward licensing 87-10938.

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>Annual Volume</u>
STOCKWATER STORAGE	01/01 to 12/31	0.6 AF
RECREATION STORAGE	01/01 to 12/31	2.8 AF

Totals: 3.4 AF

2. Recommended Amendments

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

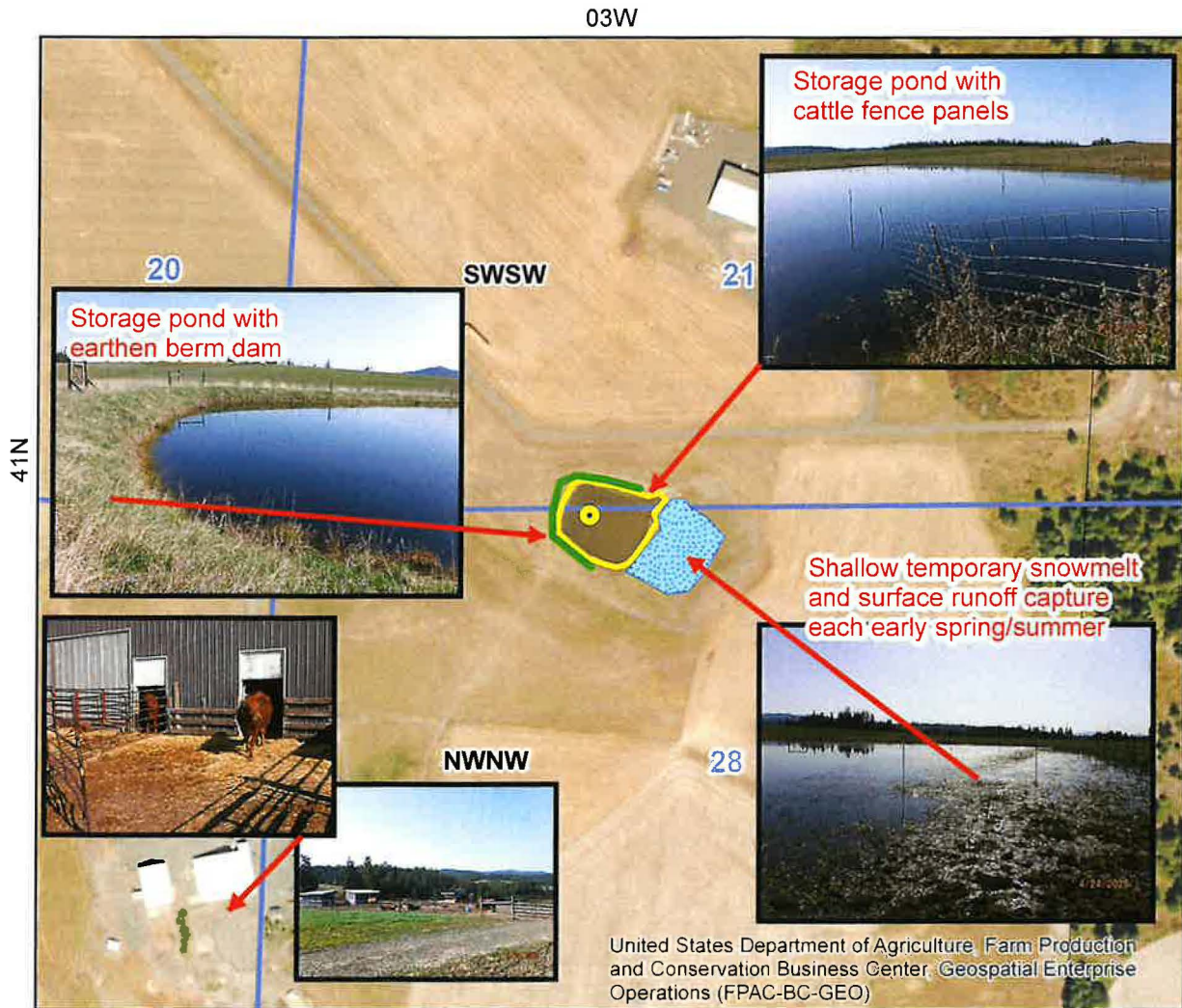
☐ Change P.U. as reflected above ☐ Add P.U. as reflected above ☒ None

I. AUTHENTICATION Luke Bates – Sr. Water Resource Agent

Field Examiner's Name LSB Date 5/21/2025
Reviewer Michelle Richman Date 8/7/2026

State of Idaho
Department of Water Resources
Attachment to Field Exam
87-10938

This map depicts the STOCKWATER STORAGE and RECREATION STORAGE system diagram.



0 0.035 0.07 0.14 Miles

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



Total Storage Calculations

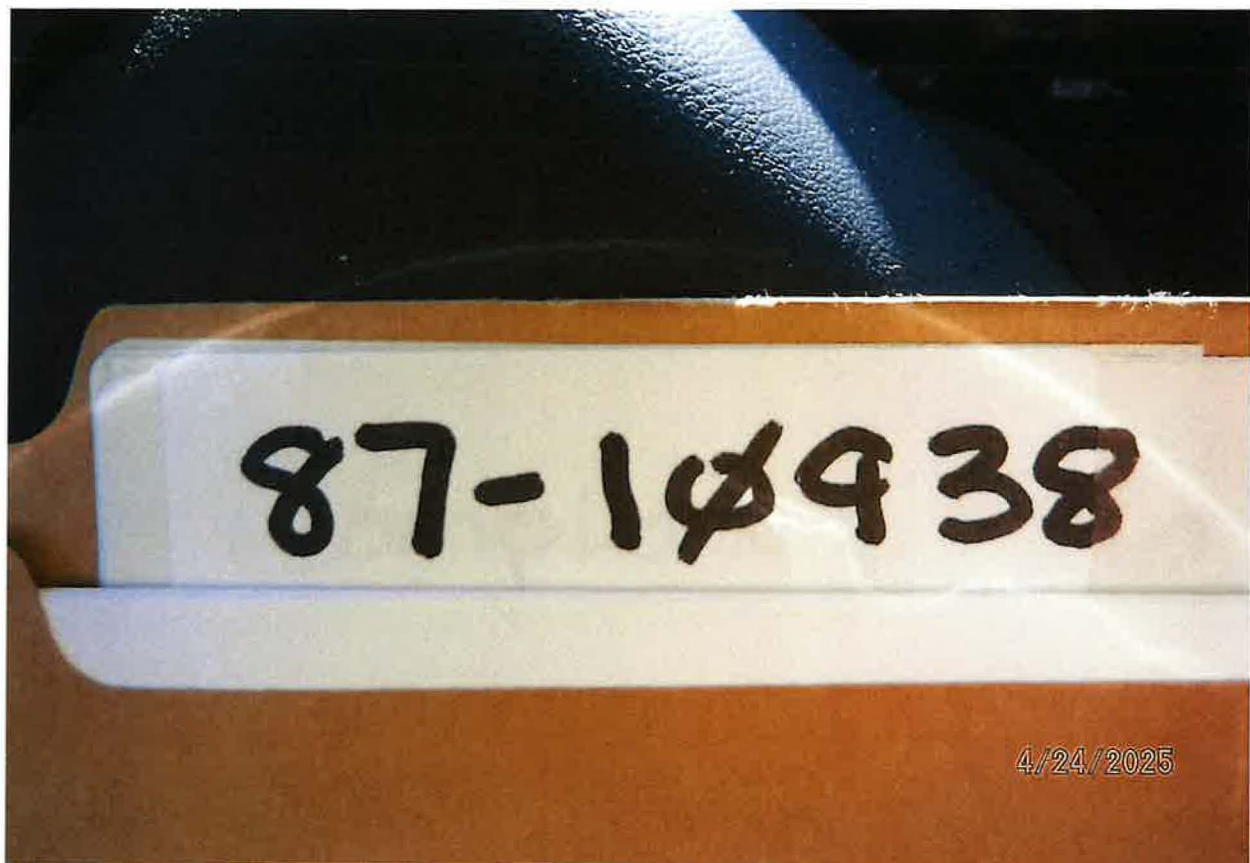
FILE NUMBER	87-10938
REVIEWER	Luke Bates
DATE	4/24/2024

This spreadsheet has been designed by Idaho Department of Water Resources to estimate the total seepage, evaporation and fill capacity required for a pond.

User Input
Calculated value
Formula Explanations

Surface Area (AC.)	0.4	"Surface Area" is automatically carried over from the "Seepage Loss" sheet.
Average Pond Depth (FT.)	4.8	"Average Pond Depth" depicts the actual depth of the pond either measured or estimated. Note: If you know the maximum depth and not the average depth, the Field Examiner's Handbook suggests multiplying the maximum depth by 0.4 to get the average depth, or you can use any method that seems reasonable to attain average depth.
Pond Capacity (AF)	2.0	Pond Capacity is calculated by multiplying the Pond Surface Area by the Average Pond Depth. If you know the capacity, divide the capacity by surface area and enter the average pond depth in the space above. Note: If pond capacity is determined using a method shown on the "Pond Capacity" sheet, the user may need to modify the value of "Pond Capacity" (cell B9) manually. Note that if the value is modified manually, the formula will be altered for future use.
Multiple Fill Volume Above Initial Fill to Fulfill From Storage Needs- "Multiple Fills" (AF)	0.6	The "Multiple Fill Volume Above Initial Fill" is the acre-feet of water required to meet a <i>from storage</i> component if the <i>from storage</i> component exceeds a one time fill. This section should not include the amount of water needed to fill the pond initially or the amount of water needed to maintain the pond level due to evaporation or seepage. For example: if a pond has a capacity of 5 acre feet and 2.5 acre feet of seepage and evaporation, but the pond is used for irrigation that requires 10 acre feet of from storage for the irrigation use, then you would insert 5 acre feet into this location (10 acre feet needed - 5 acre feet from the initial fill = 5 acre feet of additional storage needed). Note: You must have a "From Storage" component exceeding the initial fill on the permit to include a volume in this space.
Estimated Seepage Loss (AF)	0.4	The "Estimated Seepage Loss" is automatically carried over from the "Seepage Loss" sheet.
Estimated Evaporation Loss (AF)	0.4	The "Estimated Evaporation Loss" is automatically carried over from the "Evaporation Loss" sheet.
Total Volume Required (AF)	3.4	The "Total Volume Required" is calculated by adding the Pond Capacity, Multiple Fills, Seepage Loss, and Evaporation Loss amounts to determine the total amount of storage required.

LB



BENEFICIAL USE FIELD EXAM DATE 4/24/2025



POD/POU – SPRING EXCAVATED POND WITH EARTHEN BERM DAM USED FOR RECREATION STORAGE & STOCKWATER STORAGE; NO INFLOW OR OUTFLOW FROM STORAGE POND



POU – MULTI-USE SPRING (IN-POND SOURCE) STORAGE POND



ONCE SPRING RUNOFF SINKS/EVAPORATES THE POND IS BLOCKED FROM STOCK ACCESS BY STEEL T-POSTS AND FENCE PANELS EXCEPT THE SOUTHEASTERN PART OF THE POND; HELPS PREVENT BANK EROSION BY CATTLE.



FIELD EXAM EARLY SEASON IDENTIFIED RESIDUAL SNOWMELT/SURFACE RUNOFF COLLECTED IN THE SMALL BASIN; TEMPORARILY ENLARGES NORMAL POND SIZE ON SOUTHERN EXTENT OF POND



POU – STORAGE POND EARTHEN BERM DAM CONSTRUCTED ALONG WESTERN/NORHTERN/EASTERN RADIUS OF POND



STOCKWATER STORAGE FOR HORSES AND CATTLE (BREEDING PAIRS)





STOCKWATER STORAGE USE – RANGE CATTLE



WHEN PENNED, GW WELL ASSOCIATED WITH DECREEED RIGHT 87-11123 USED TO PROVIDE STOCK WATERING