

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 96-13807

Exam Date: 05/22/2025

1. Current Owner:

MELISSA HENDRICKSON 495 W GOLD CREEK RIDGE RD SANDPOINT ID 83864 AND
JAMES KARAMBAY 495 W GOLD CREEK RIDGE RD SANDPOINT ID 83864

2. Accompanied by: Mellissa Hendrickson

Phone No: 208-786-2455

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
96-12536	Ground Water	Domestic	Notice of Claim – CFRBA
96-12543	Ground Water	Domestic	Notice of Claim – CFRBA

Comments: Two Notice of Claim(s) were filed by the Permit Holder's in the ongoing Clark Fork Pend Oreille River Basin Adjudication process:

- 96-12536 – Claim is associated with a ground water source system used for domestic use with an overlapping POU to this Permit's Irrigation from Storage POU. Based on the Claim asserting a ground water source for domestic use, which I've validated are a separate water system and Beneficial Use (BU), there is no concern for overlap between Water Rights (WRs).
- 96-12543 – Review of Backfile information on the Claim provides a Department correspondence letter – Violation of the Mandatory Permit Statute; this indicates the Permit Holders filed for the storage pond as a groundwater source with historic water use beginning sometime after 5/20/1971. The letter was dated 9/13/2022 and this Permit's Application was received on 11/23/2022 indicating the Permit Holders re-filed and changed the water source from Ground Water-to-Spring water as part of the filing. There is no concern for overlapping between WRs.

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

NO Overlap

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

SPRING NE¼ NE¼ SW¼, Sec. 7, Twp 58N, Rge 01E, B.M. BONNER County

Method of Determination: GPS. POD is an in-pond spring source with the source located at approximately -116°23.203, 48°23.555.

PLACE OF USE: IRRIGATION 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	
58N	01E	7									X								

PLACE OF USE: IRRIGATION FROM 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	
58N	01E	7									0.8								0.8

Total Acres: 0.8

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.

☒

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
SPRING					

D. FLOW MEASUREMENTS

1.

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

2. Measurements: NONE, in-spring source which impounds spring water. Serves as an instream pond with no diversion rate applied to water right.

E. FLOW CALCULATIONS

Measured Method: N/A

F. VOLUME CALCULATIONS

1. Volume Calculations for irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 0.8 \text{ ac} \times 3.0 \text{ afa} = 2.4 \text{ af}$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = \text{N/A} - \text{instream pond without diversion rate.}$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = \mathbf{2.4 \text{ af}}$$

2. Volume Calculations for Other Uses: See attached Pond Analysis Worksheet.

G. NARRATIVE/REMARKS/COMMENTS

Beneficial use field exam conducted on 5/22/2025 with the Permit Holder, Melissa Hendrickson, showed a storage pond that was excavated-in part to impound a spring water source for Recreation Storage, Irrigation Storage, and Irrigation from Storage beneficial uses (BUs). The southern extent of the storage pond has been deepened to capture the spring water source which maintains water levels into late spring before the spring source beings to lose productivity. Admittedly the pond benefits from seasonal peak runoff periods but the Permit Holder's observation is that the spring keeps up into late summer before evaporation and any seepage starts to dry up the Northern extent of the storage pond.

There isn't an overflow device on the pond which is situated in a naturally depressed area of a knoll. I used ArcMap aerial imagery to designate the POD on the Southern extent of the storage pond where the pond was deepened to capture spring water. There isn't a diversion rate associated with this Right due to the spring being in-stream within the pond's high-water mark.

Photographs were taken during the field exam illustrating the storage pond that serves as the Recreation Storage & Irrigation Storage POU. Following the exam, Arcmap aerial imagery was used to trace out the surface areas of the pond equaling 0.4 acres in total. I've detailed the storage pond(s) volumetric data below:

- The pond has a maximum depth 10 ft, average depth 4 ft, surface area 0.4 acres, pond capacity 1.6 af, 2.9 af of seepage loss, 0.4 af estimated evaporation loss and a total volume required of 4.9 af not including multiple fills for irrigation from storage. **4.9 af** accounts for the Recreation Storage annual volume toward licensing the Permit.
- Irrigation storage & from storage annual volume = $0.8 \text{ ac} \times 3.0 \text{ afa} = 2.4 \text{ af}$. The pond analysis worksheet includes the **2.4 af** for multiple fills when water is available from the spring throughout the irrigation season of use.
- Maximum diversion volume equals the sum of the pond's total volume + irrigation multi-fill requirements = $4.9 \text{ af} + 2.8 \text{ af} = \mathbf{7.3 \text{ af}}$ as recommended for licensing this Permit.

A Honda portable generator framed water transfer pump is used with several sections of flexible fire hose to distribute water from the storage pond to three ICB 275-gal water tanks and a rotomolded 500 gallon black storage tank; irrigation is by hose and spray nozzle and or flood irrigating for multiple garden plots, berry bushes, orchard trees, hoop gardens, and landscape plants around the residence. A 4-wheeler with portable tank is used to reach areas that the transfer pump distribution point is not able to reach. During the field exam I took several photographs to illustrate active irrigation at the POU and during licensing review I used Bonner County tax parcel map aerial imagery coupled with ArcMap GIS imagery to accurately trace out the irrigation from storage POU which equals 0.8 acres for licensing purposes. The Irrigation storage and Irrigation from storage 2.4 af as recommended is not additive toward the maximum diversion volume (the value only counts one time).

I removed condition 220 from the Permit during licensing review based on verbal guidance received from the Department's Deputy Director Shelley Keen. I have revised condition 259 to describe the storage pond's volumetric data and multiple fill volumetric data. The Permit authorized larger volume values than what was validated during the field exam which results in a reduction of maximum diversion volume as recommended for licensing purposes. All other conditions on the Permit shall be carried forward to the license. There are no overlapping water right concerns toward licensing Permit 96-13807.

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>
IRRIGATION STORAGE	01/01 to 12/31	2.4 AF
IRRIGATION FROM STORAGE	04/01 to 10/31	2.4 AF
RECREATION STORAGE	01/01 to 12/31	4.9 AF

Totals: 7.3 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



Date

11/13/2025

Reviewer

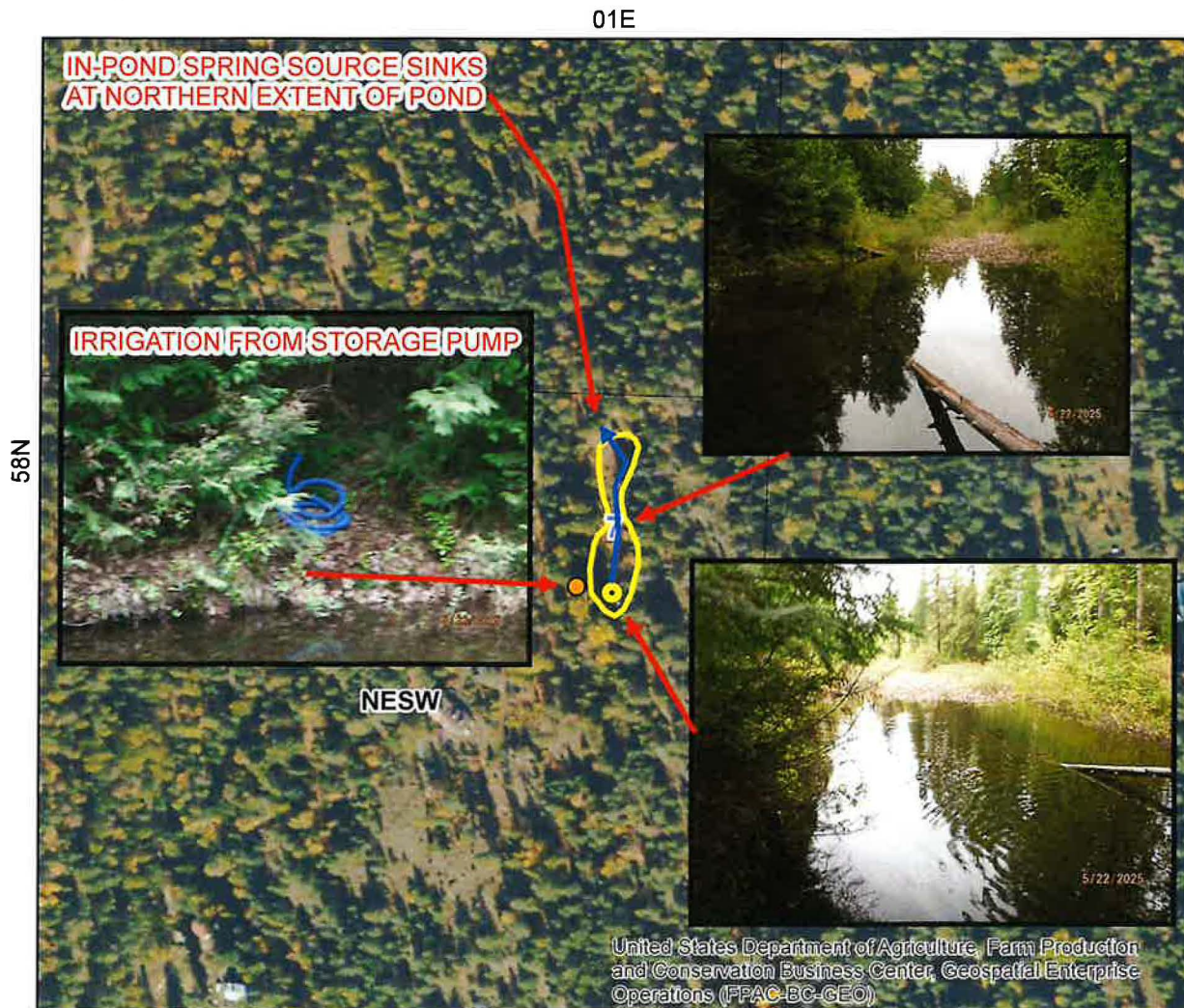


Date

6/30/2026

State of Idaho
Department of Water Resources
Attachment to Field Exam
96-13807

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



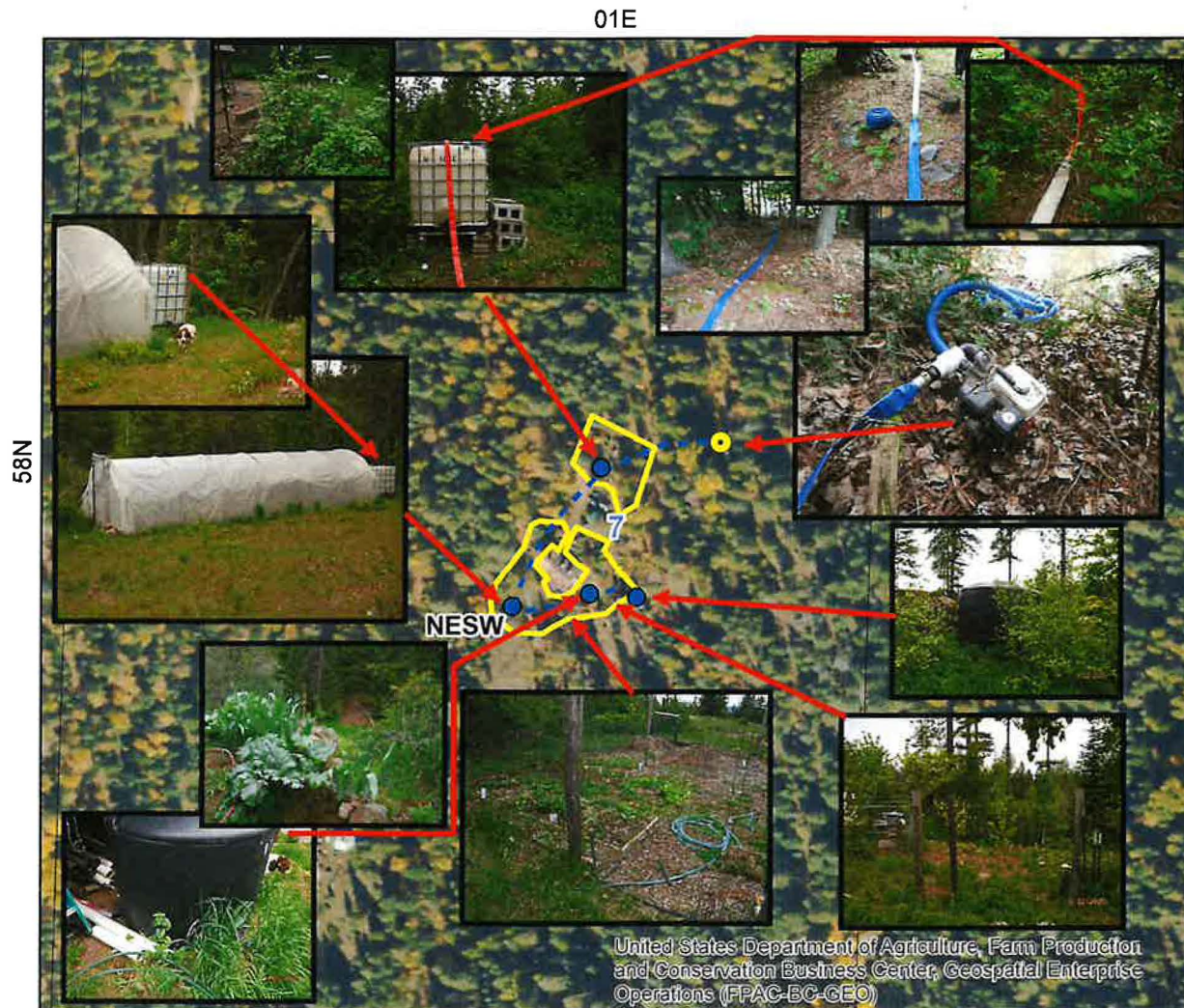
0 0.035 0.07 0.14 Miles

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



State of Idaho
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This map depicts the IRRIGATION FROM STORAGE system diagram.



0 0.035 0.07 0.14 Miles

- Storage Tank(s) for Irrigation Use
- Place Of Use Boundary
- Point of Diversion
- Townships
- PLS Sections
- Quarter Quarters



Total Storage Calculations

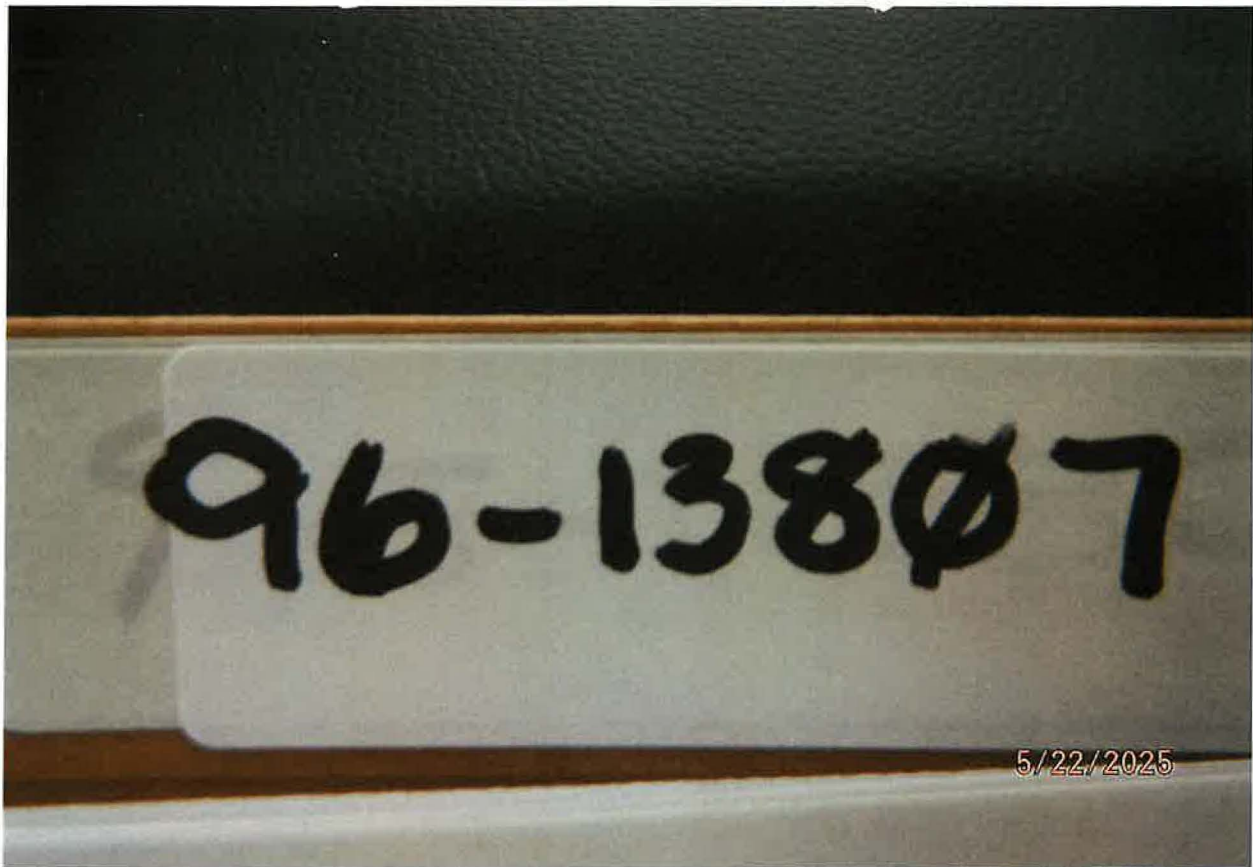
FILE NUMBER	96-13807
REVIEWER	Luke Bates
DATE	6/9/2025

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	"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)	1.6	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)	2.4	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 " <u>From Storage</u> " component exceeding the initial fill on the permit to include a volume in this space.
Estimated Seepage Loss (AF)	2.9	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)	7.3	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.



BENEFICIAL USE FIELD EXAM DATE 5/22/2025



POD/POU – IN-POND SPRING WATER SOURCE



POD – SPRING SOURCE LOCATED IN SOUTHERN EXTENT OF STORAGE POND
POU – RECREATION STORAGE AND IRRIGATION STORAGE POND



IRRIGATION FROM STORAGE WATER CONVEYANCE SYSTEM



IRRIGATION FROM STORAGE SMALL GENERATOR FRAMED WATER TRANSFER PUMP





IRRIGATION FROM STORAGE – WATER PUMPED VIA 1.5-INCH FLEXIBLE FIRE HOSES (MULTIPLE) TO FILL TEMPORARY STORAGE TANK(S)





CONVEYANCE SYSTEM – HOSE SECTIONS OF VARYING COLOR



IRRIGATION FROM STORAGE – ONE OF MULTIPLE ICB 275-GAL STORAGE TANKS



IRRIGATION FROM STORAGE POU – VARIOUS BERRY BUSHES WATERED FROM TANKS VIA BANJO FITTING TO HOSE ATTACHMENT





IRRIGATION FROM STORAGE POU – FENCED GARDEN AREA





IRRIGATION FROM STORAGE POU – BLACK CYLINDRIC STORAGE TANK





IRRIGATION FROM STORAGE POU – ICB 275-GAL TEMP STORAGE TANK TO HOOP
GARDEN WATERING





IRRIGATION FROM STORAGE POU – FENCED GARDEN SPACE



IRRIGATION FROM STORAGE POU – VAREOUS PLANTS/BUSHES WATERED NEAR RESIDENCE



IRRIGATION FROM STORAGE POU





IRRIGATION FROM STORAGE POU