

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 86-12096
Exam Date: 06/28/2023

1. Current Owner:
DAVID SALMERI 3108 HIGHWAY 3 DEARY ID 83823-9603
2. Accompanied by: Permit Holder/ Current owner

3. **SOURCE:**
UNNAMED STREAM

Tributary
PINE CREEK

Method of Determination: DRG GIS layer and site observations

B. OVERLAP REVIEW

1. Other water rights with the same place of use: NO Overlap

Water Right No.	Source	Purpose of Use	Basis
n/a			

Comments: NO overlap

2. Other water rights with the same point-of-diversion: NO Overlap

Water Right No.	Source	Purpose of Use	Basis
n/a			

Comments: NO overlap

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

UNNAMED STREAM SE¼ SW¼, Sec. 23, Twp 40N, Rge 02W, B.M. LATAH County
UNNAMED STREAM SE¼ SW¼, Sec. 23, Twp 40N, Rge 02W, B.M. LATAH County

Method of Determination: GPS and site observations

PLACE OF USE: STOCKWATER 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	
40N	02W	23												X					

PLACE OF USE: 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	
40N	02W	23												X					

PLACE OF USE: FIRE PROTECTION 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	
40N	02W	23												X					

Method of Determination: GIS and site observations

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

Aerial Photo Attached (required for irrigation of 10+ acres).

 x

Photo of Diversion and System Attached

 x

4.

Diversion ID Numbers
995933 (upstream pond) & 995934 (downstream pond)

D. FLOW MEASUREMENTS

1.

Measurement Equipment	Type	Make	Model No.	Serial No.	Size	Calib. Date
n/a						

2. Measurements: No flow components on water right, no measurements made

E. FLOW CALCULATIONS Additional Computation Sheets Attached

Measured Method: No flow components on water right permit

F. VOLUME CALCULATIONS

*See attached *Total Storage Calculations*

Salermi said the downstream, bigger pond has a maximum depth of 15 ft and the upstream pond is likely 6 ft. both are basin shaped (average depth = 6 ft and 2.4 ft, respectively)

Upper Pond SA = 0.151 acres Lower Pond SA = 0.402 acres Total = 0.553 acres

Total Capacity = $(0.402 \text{ acres} * 6 \text{ ft}) + (0.151 * 2.4) = 2.8 \text{ AF}$

Estimated Losses = 1.3 AF

Total Volume Req = 4.1 AF

Stockwater Volume:

Salermi has 2 cows and 2 horses that drink directly from the ponds (0-10 head of range cattle = 0.2 AF (from app processing memo no. 3))

Permitted volume = 0.1 AF = maximum recommended amount

Combined Volumes = 4.1 AF + 0.1 AF = 4.2 AF

G. NARRATIVE/REMARKS/COMMENTS

Permit no. 86-12096 authorized two diversions from an unnamed stream tributary to Pine Creek in SE¼ SW¼, Sec. 23, Twp 40N, Rge 02W, B.M., LATAH County. The permit authorized the construction of two ponds on land owned by the permit holder for stockwater storage, stockwater from storage, wildlife storage, recreation storage, and fire protection storage. Proof was received on October 28, 2022 and field exams took place June 28, 2023 for permits 86-12096 and 86-12095.

The POD's were confirmed via GIS and field observations to have been permitted correctly. The upstream pond fills from an unnamed stream tributary to Pine Creek, which then overflows back into the stream until the water collects into the downstream, larger pond. A road culvert also delivers diffuse surface water runoff to the pond. The outflow from the second pond continues downstream. The place of use for the various uses were confirmed via field observations and aerial imagery. There are no POD or POU overlap concerns.

Development of stockwater storage, recreation storage, and fire protection storage uses were confirmed via field observations and conversations with permit holder and landowner, David Salermi. Salermi is on the volunteer fire department and both ponds can be use as a water source for fire suppression. He has 2 cows and 2 horses that drink directly from the ponds. As the water is not diverted from the pond for stockwater use, I recommend removing the stockwater from storage use.

When the application was advertised, Fish and Game commented that the application did not provide sufficient evidence that the water was being managed to enhance the stability or growth of a targeted population, nor is storage water necessary for wildlife within the place of use's general area. Since Salermi did not provide sufficient evidence in the proof statement or during the field exam, I am recommending removing the use.

No flow rate analysis has been performed since the permit has no flow elements. The ponds' capacities were determined using GIS aerial imagery and Salermi's total depth estimates for each pond. Soil data and evapotranspiration rates were used to estimate losses throughout the year. The permit only authorized a volume of 0.1 acre-ft for stockwater consumption, which is less than the standard for 1-10 head of range cattle, and that is my recommendation for the stockwater storage

volume. The overall volume recommended for the ponds is 4.2 acre-ft, which is the sum of the capacity, losses, and usage of the pond for stockwater.

Conditions 220 and 259 should be revised to represent the developed capacities and uses of the ponds. Condition 029 can be removed as Fish & Game did not require a fish screen in their comment. At the points of diversion for this permit, it is certain that a fish screen would not be needed, anyways. X02 can be removed at licensing, as is standard. The handwritten condition "Pond(s) storage is for wildlife and recreation uses." can also be removed because it is superfluous. Condition 227 should remain on the water right due to DEQ's submitted comment and Luke Bates' Rule 40 Regional Analysis Memo; Pine Creek is tributary to the Potlach River, which is tributary to the Clearwater River. Condition 004 can also be removed the POD is very clearly on the permit holder's land.

Have conditions of permit approval been met? ☒ 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>
STOCKWATER STORAGE	01/01 to 12/31		0.1 AF
RECREATION STORAGE	01/01 to 12/31		4.1 AF
FIRE PROTECTION STORAGE	01/01 to 12/31		4.1 AF

Totals:

4.2 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

Blake Burkard -

Field Examiner's Name

Date

Reviewer

Date

3/7/25

3/7/25

Total Storage Calculations

FILE NUMBER	86-12096	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
REVIEWER	Blake Burkard		Calculated value
DATE	8/7/2023		Formula Explanations

UPSTREAM POND

Print Page to PDF

Surface Area (AC.)	0.151	"Surface Area" is automatically carried over from the "Seepage Loss" sheet.
Average Pond Depth (FT.)	2.4	"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)	0.3624	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	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)	0.2	The "Estimated Seepage Loss" is automatically carried over from the "Seepage Loss" sheet.
Estimated Evaporation Loss (AF)	0.2	The "Estimated Evaporation Loss" is automatically carried over from the "Evaporation Loss" sheet.
Total Volume Required (AF)	0.7	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.

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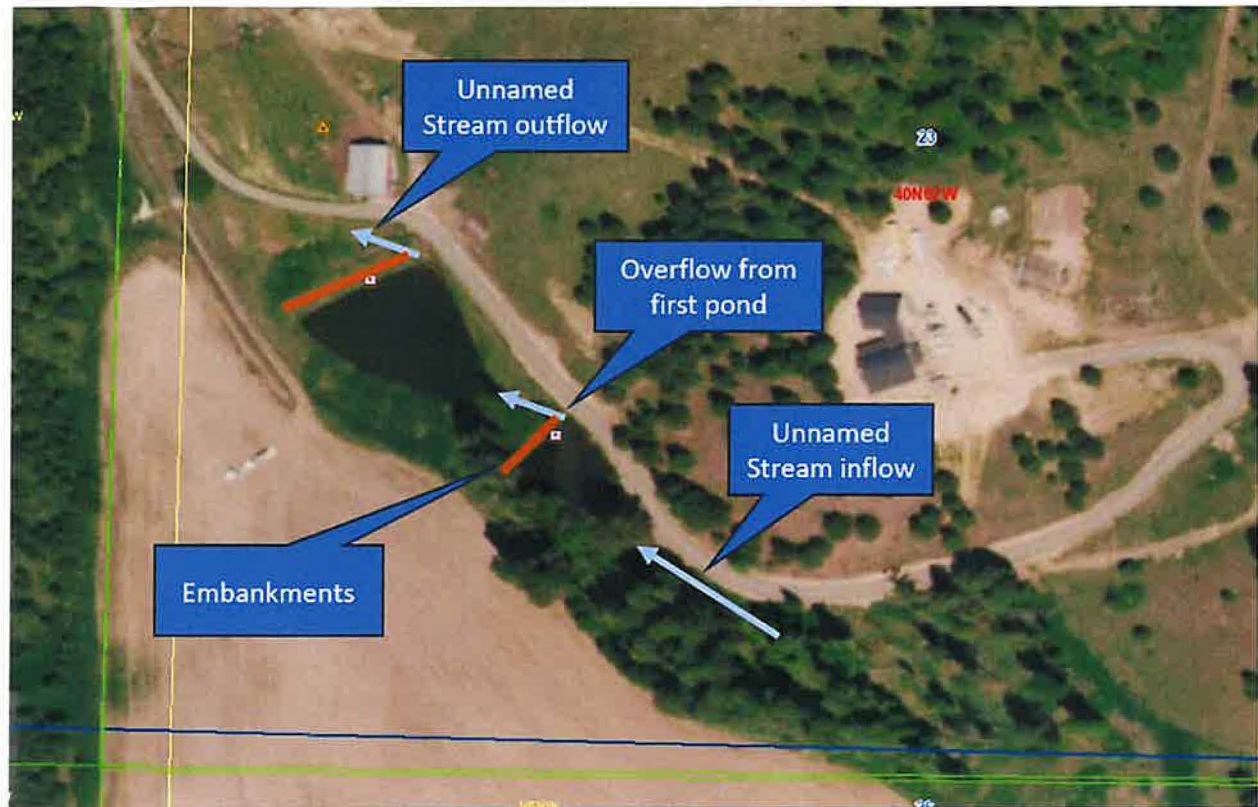


Figure 1: Flow System Diagram



Figure 2: Soil Classification (CL)



Figure 3: Downstream Pond looking Northwest



Figure 4: Downstream Pond facing southeast. Embankment runs towards truck along north edge of pond. Notice livestock dung



Figure 5: Upper Pond, facing southwest. Road culvert on the left of the photo



Figure 6: Overflow from the upper pond to the lower pond, facing north



Figure 7: Outflow from the lower pond. Water flows north out of pond



Figure 8: GPS of Upper (left) and Lower (Right) Outflow locations