

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 94-9392
Exam Date: 10/02/2020

1. Current Owner:
RICHARD L DOMBROWSKI PO BOX 95 HARRISON ID 83833-0095
2. Accompanied by: Richard Dombrowski
Phone No: 208-819-7814
Address: Same as above
Relationship to permit Holder: Permit holder

3. **SOURCE:**
RUNOFF/UNNAMED STREAM

Tributary
SINKS

Method of Determination: Arcmap and DRG

B. OVERLAP REVIEW

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

Water Right No.	Source	Purpose of Use	Basis

Comments: _____

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

Water Right No.	Source	Purpose of Use	Basis

Comments: _____

C. DIVERSION AND DELIVERY SYSTEM

1. **LOCATION OF POINT(S) OF DIVERSION:**

RUNOFF/UNNAMED STREAM NW¼ SW¼, Sec. 8, Twp 47N, Rge 03W, B.M. KOOTENAI County

Method of Determination: GPS. POD is an earthen dam located at -116°45.180, 47°26.127.

PLACE OF USE: WILDLIFE STORAGE and 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	
47N	03W	8										X							

Method of Determination: Field exam and year 2019 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
NONE					

D. FLOW MEASUREMENTS

1.

Measurement Equipment	Type	Make	Model No.	Serial No.	Size	Calib. Date
N/A						

2. Measurements: N/A

E. FLOW CALCULATIONS

Measured Method: N/A

F. VOLUME CALCULATIONS

1. Volume Calculations for irrigation: N/A

$$V_{I.R} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) =$$

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

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

2. Volume Calculations for Other Uses:

See attached pond analysis sheet

G. NARRATIVE/REMARKS/COMMENTS

Field exam performed on 10/2/2020 with the applicant, Richard Dombrowski, showed a small pond that captured water from a runoff/unnamed stream excavated for wildlife storage and fire protection storage purposes. Mr. Dombrowski was permit approved to excavate the pond, and used an older computation method to calculate the pond volume factors. During licensing review, a current department pond analysis worksheet was used derive the pond capacity and volume.

During the field exam, GPS was used to identify the location of the pond, which is in a treed area on the applicant's parcel. The shape and area of the pond was traced out on field maps, and during licensing review year 2019 Arcmap aerial imagery

was used to trace out the surface area of the pond, which equaled 0.05 acres. The pond had a surface area of 0.05 acres, a maximum depth of 4 ft, an average depth of 1.6 ft, pond capacity of 0.2 af, a seepage loss of 0.1 af, and estimated evaporation loss of 0.1 af annually. The total volume required equals 0.4 af annually. Applicant was permit approved for 3.6 af of storage, but is limited by the constructed pond size, and minimal seepage and evaporation rates using the current pond analysis sheet versus the application pond computation sheet. As a result, the annual and maximum diversion volume recommended for licensing equals **0.4 af** for both wildlife storage and fire protection storage (non-additive).

Mr. Dombrowski stated the pond typically held water until late summer, but that this year it had dried up earlier than usual. This is likely due to the unusually dry year during the region. At time of the field exam, it was identified that there was no system in place for the fire protection from storage beneficial use, and it had not been developed during the permit development period. The fire protection from storage beneficial use was removed from the permit during licensing review.

Condition 26A and 082 were removed from the permit during licensing review. Condition 219 and 220 were updated to reflect current department pond analysis values. All other conditions on permit will remain on the license. There are no overlap concerns for this water right.

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

H. RECOMMENDATIONS

1. Recommended Amounts

<u>Beneficial Use</u>	<u>Period of Use</u>	<u>Annual Volume</u>
WILDLIFE STORAGE	01/01 to 12/31	0.4 AF
FIRE PROTECTION 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

I. AUTHENTICATION

Luke Bates - Water Resource Agent

Field Examiner's Name  Date 10/22/2020

Reviewer  Date 10/30/2020

State of Idaho
Department of Water Resources
Attachment to Field Exam
94-9392

WILDLIFE STORAGE and FIRE PROTECTION STORAGE system diagram.



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

0 0.03 0.06 0.12 Miles



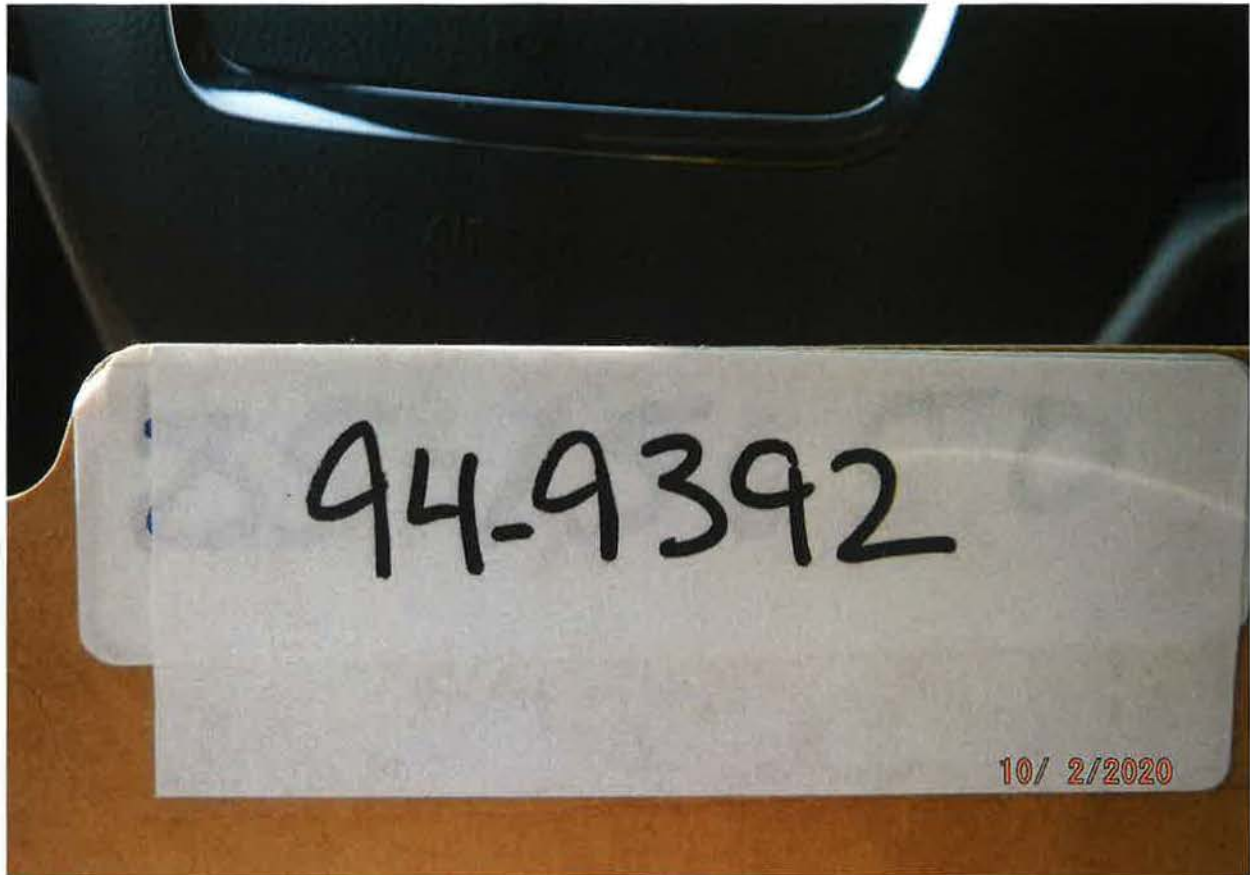
Total Storage Calculations

FILE NUMBER	94-9392
REVIEWER	Luke Bates
DATE	10/21/2020

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.)	0.1	"Surface Area" is automatically carried over from the "Seepage Loss" sheet.
Average Pond Depth (FT.)	1.6	"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)	0.2	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)	0.1	The "Estimated Seepage Loss" is automatically carried over from the "Seepage Loss" sheet.
Estimated Evaporation Loss (AF)	0.1	The "Estimated Evaporation Loss" is automatically carried over from the "Evaporation Loss" sheet.
Total Volume Required (AF)	0.4	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.



POD - EARTHEN DAM



FIRE PROTECTION STORAGE & WILDLIFE STORAGE POU – POND



POND OVERFLOW DISCHARGE PIPE INTAKE



POND OVERFLOW DISCHARGE PIPE OUTFLOW