

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 95-17584
Exam Date: 10/19/2023

1. Current Owner:
JOHN R BRIGGS 5523 E BURMA RD HARRISON ID 83833

2. Accompanied by: JOHN BRIGGS
Phone No. (208) 659-3226
Address: Same as above
Relationship to permit Holder: Permit Holder

3. **SOURCE:**
UNNAMED STREAM

Tributary
COEUR D ALENE LAKE

Method of Determination: ArcMap and DRG.

GPS Locator -116 44.771, 47 35.538 for the stream; -116 44.711, 47 35.502 for the spring

B. OVERLAP REVIEW

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

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

UNNAMED STREAM SE¼ NE¼, Sec. 17, Twp 49N, Rge 03W, B.M. KOOTENAI County

Method of Determination: Field Exam and GPS Locator -116 44.771, 47 35.538 POD

PLACE OF USE: WILDLIFE 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	
49N	03W	17				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	
49N	03W	17				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	
49N	03W	17				X													

Method of Determination:

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
X 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
NONE						

2. Measurements: Field Exam was completed in October 2023 and there was evidence of water still but it was not enough to complete a flow measurement. The unnamed stream was not flowing during field exam.

E. FLOW CALCULATIONS

Measured Method: None taken, stream not flowing. The field exam shows that this is an instream pond per the culvert going under the road and the channel leading directly to the pond. There is also evidence of a spring near the unnamed stream with a marshy area and cattails. However, the spring was removed from the Water Right as a point of diversion due to the unnamed stream channel leading to and through the Pond. The pond still had substantial water in it late in the season.

F. VOLUME CALCULATIONS

- Volume Calculations for irrigation: **No irrigation on this water right.**
- Volume Calculations for Other Uses: **Provided on pond analysis sheet**

G. NARRATIVE/REMARKS/COMMENTS

Department staff performed the field examination unaccompanied on October 19, 2023 with the applicant John Briggs. The applicant stated that the pond was 10 feet deep at the deepest part. The depth of the pond was originally calculated that it was 14 feet at the deepest point. Adjustments have been made on the pond calculation sheet.

The permit was approved as an off-stream pond fed from an unnamed stream and a spring on the applicant's property. The Statement of Completion was submitted on August 28, 2023. The source was named as a spring. Although there is evidence of a spring near the stream channel, the unnamed stream clearly flows into the pond and also flows out of the pond at the point of diversion. The area that shows what may have been a former stream channel on the map was dry and did not have evidence of any recent flowing water. The evidence from 2015 on Google Maps shows that the pond is an instream pond from the unnamed stream and the spring wasn't present at that time but there was another stream channel running parallel to the current stream. Therefore, I have removed the Diversion to Storage component along with the spring as a point of diversion from the License.

The pond is used for Recreation Storage, Fire Protection Storage & Wildlife Storage. The pond dam is approximately 270 feet across. A GPS Locator was used to calculate latitude and longitude for the POD from the unnamed stream which was -116 44.771, 47 35.538 or SE¼ NE¼, Sec. 17, Twp 49N, Rge 03W, B.M. KOOTENAI County. There was a 4 inch PVC overflow discharge pipe and an outflow channel through a culvert to a plastic ½ pipe approximately 12 feet long, as shown in the pictures provided.

A culvert at the private road was located about 70 feet east of the spring. The culvert was completely dry on both sides of the road due to it being very late in the season (October). There was a dry stream channel leading up to

the spring which was where water became evident. Walking along the bank towards the earthen dam, there was still quite a bit of water in the pond and you could not see the bottom of the pond.

During the Licensing review the pond was traced out, along with the island area in the middle of the pond, to calculate the surface area of the pond. The surface area was exactly 0.5 acres as was stated on the previous Pond Analysis sheet. The pond depth was decreased from 14 feet to 10 feet which changed the average pond depth to 4 feet. This lowered the pond capacity to 2 acre feet. With an estimated seepage of 0.5 af & evaporation loss estimated at 0.6 af the total volume has been adjusted to 3.1 af (see attached Pond Analysis Sheet).

The annual volume for all the uses which are Fire Protection Storage, Wildlife Storage and Recreation Storage is equal to 2 af (pond capacity) + 0.1 af (seepage/evaporation loss rates) = 3.1 af which is recommended for licensing. Condition 26A was removed from conditions due to the project being complete. Conditions 219 was changed to reflect the change in depth for the pond as per the Pond calculation sheet attached. Condition 220 was removed from the License. No other conditions were modified or removed.

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>
WILDLIFE STORAGE	01/01 to 12/31		3.1 AF
RECREATION STORAGE	01/01 to 12/31		3.1 AF
FIRE PROTECTION STORAGE	01/01 to 12/31		3.1 AF

Totals:

3.1 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 Tammy Alleman -

Field Examiner's Name Tammy Alle Date 11/28/23

Reviewer _____ Date _____

State of Idaho
Department of Water Resources
Attachment to Field Exam
95-17584

This map depicts the WILDLIFE STORAGE, RECREATION
STORAGE, & FIRE PROTECTION STORAGE system diagram.

03W



0 0.035 0.07 0.14 Miles

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



Total Storage Calculations

FILE NUMBER	94-9692
REVIEWER	Tammy Alleman
DATE	11/22/2023

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.)	0.5	"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)	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 " <u>From Storage</u> " component exceeding the initial fill on the permit to include a volume in this space.
Estimated Seepage Loss (AF)	0.5	The "Estimated Seepage Loss" is automatically carried over from the "Seepage Loss" sheet.
Estimated Evaporation Loss (AF)	0.6	The "Estimated Evaporation Loss" is automatically carried over from the "Evaporation Loss" sheet.
Total Volume Required (AF)	3.1	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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BENEFICIAL USE FIELD EXAM 10/19/23



POD – EARTHEN DAM FOR UNNAMED STREAM



SOURCE – UNNAMED STREAM, CULVERT AND CHANNEL LEADING TO POND



POU - POND FOR RECREATION , FIRE PROTECTION, AND WILDLIFE



POU - VIEW FROM EARTHEN DAM WITH MAIN OUTFLOW PIPE (WHITE)



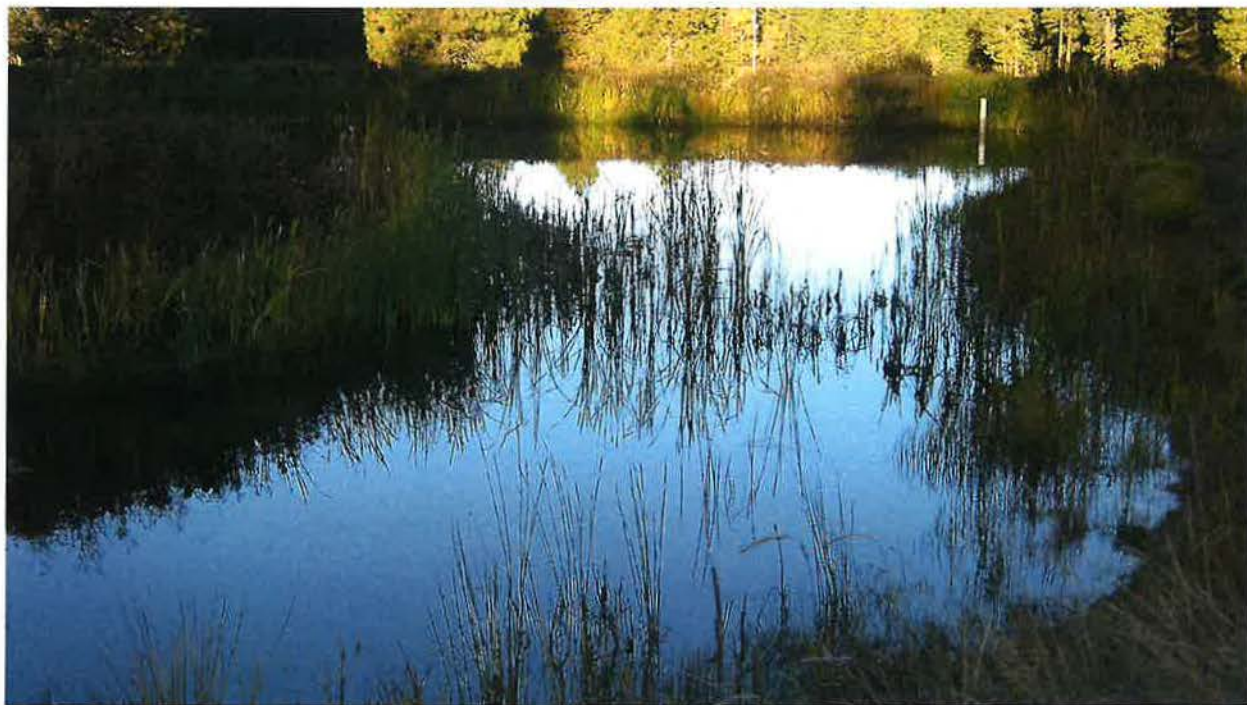
AREA WITHIN STREAM CHANNEL THAT APPLICANT STATES IS A SPRING
AS IT HAS A CONSTANT FLOW COMING OUT OF THE GROUND





OUTFLOW CHANNEL FROM EARTHEN DAM





POU – Pond





POU – Pond



Unnamed Stream Outflow Channel