

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 96-09433

Exam Date: 8/10/2017

1. Current Owner:
BRYON GARRICK 1593 E SHINGLE MILL RD SANDPOINT ID 83864 (208) 920-1055
2. Accompanied by: Byron Garrick
Relationship to Permit Holder: Owner
3. **SOURCE:**
UNNAMED STREAM
- TRIBUTARY:**
BOYER SLOUGH

B. OVERLAP REVIEW

1. Other water rights with the same place of use: None
2. Other water rights with the same point-of-diversion: None

C. DIVERSION AND DELIVERY SYSTEM**1. LOCATION OF POINT(S) OF DIVERSION:**

UNNAMED STREAM NW¼SW¼ Sec. 28, Twp 58N, Rge 01W, B.M. BONNER County

Method of Determination: Maps and GPS. POD located at 48° 20.809, 116°28.882

2.

PLACE OF USE: WILDLIFE STORAGE

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
58N	01W	28										X							

Method of Determination: Arc map and Google Earth.

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
N/A					

*Code to correspond with No. on map and aerial photo

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

____ Additional Computation Sheets Attached

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation: N/A

2. Volume Calculations for Other Uses: SEE ATTACHED POND ANALYSIS SHEET

G. NARRATIVE/REMARKS/COMMENTS

Field exam with applicant, Byron Garrick showed a pond with 6-8 foot high dam. The dam was much higher than the actual outlet which was lower than the dam with a bridge over it. Water was not flowing at time of exam and probably only flowed during spring and fall. Outlet was armored with large rocks as was the rest of the dam. Applicant had put finer gravel on top for easier access to walk on top of dam. Mr. Garrick said the maximum depth was 6 feet and water was about a foot down from outlet. Water was murky and full of algae because there was no active inflow of water to pond.

The pond shows up on DRG as a natural pond and applicant said it was originally a beaver pond. The dam washed away and applicant filed an application for permit to then replace the beaver dam with a man-made dam. Pond was formed in a swampy area where runoff water and an unnamed stream flowed. When water was flowing through the pond, it would reach Boyer Slough.

Pond was outlined using Arc map which measured out to be 1.0 acres in surface area. Using pond analysis tool it was determined that the actual pond size including depth was 2.4 acre-feet of storage. Evaporation and seepage each came out to be 1.1 acre-feet. License will be issued for 4.6 acre-feet of wildlife storage with no overlap concerns.

Have conditions of permit approval been met? X Yes No**H. RECOMMENDATIONS****1. Recommended Amounts**BENEFICIAL USE

WILDLIFE STORAGE

PERIOD OF USE

01/01 to 12/31

ANNUAL VOLUME

4.6 AF

Totals:

4.60 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**

Field Examiner's Name

Adam Finkel

Date

8-16-2017

Reviewer

Douglas Jones P.E. No. Reg. Mgr.

Date

11/24/17

Total Storage Calculations

FILE NUMBER	96-9433
REVIEWER	Adam Frederick
DATE	8/15/2017

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

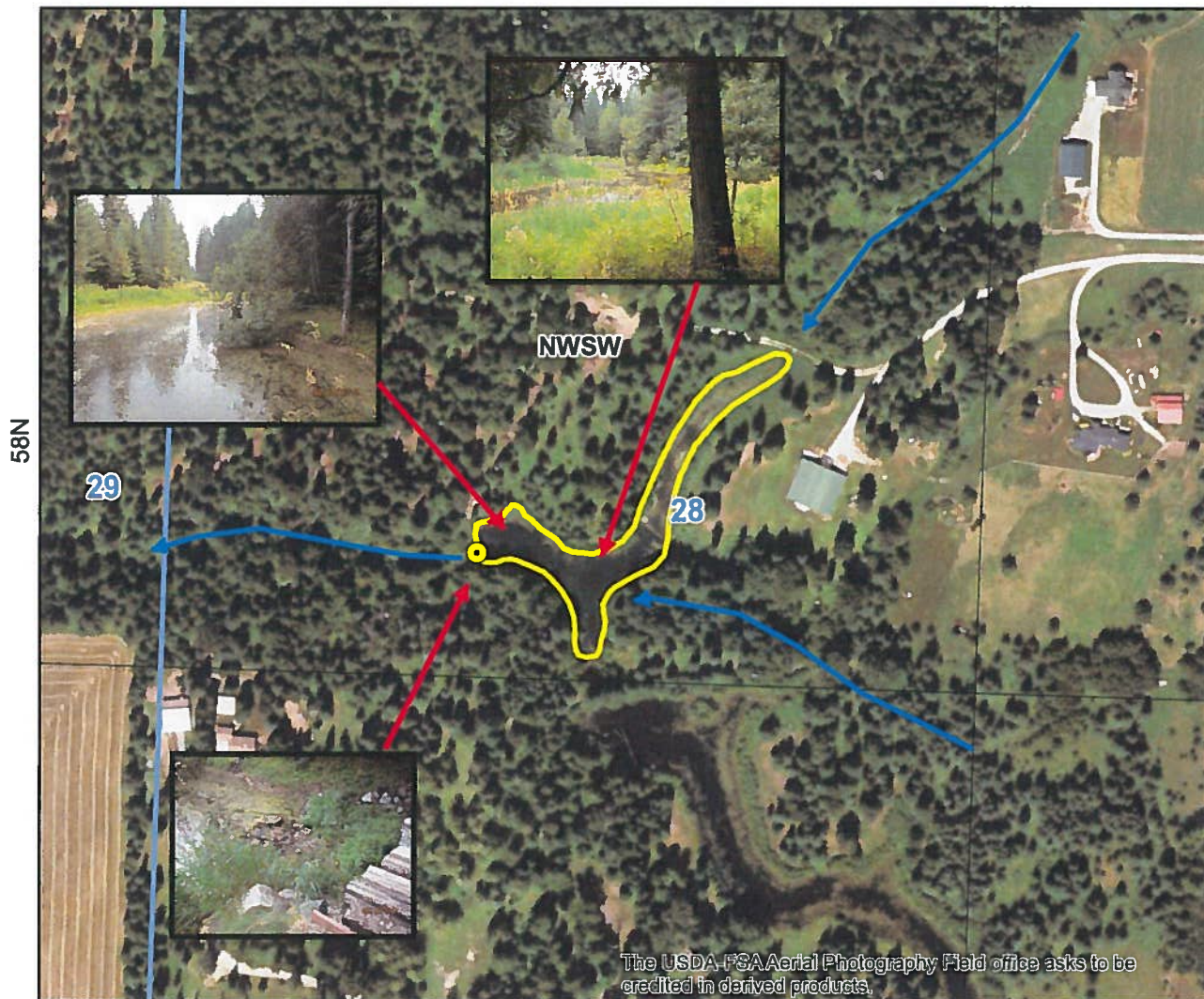
User Input
Calculated value
Formula Explanations

Surface Area (AC.)	1	"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)	2.4	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. <i>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.</i>
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). <i>Note: You must have a "From Storage" component exceeding the initial fill on the permit to include a volume in this space.</i>
Estimated Seepage Loss (AF)	1.1	The "Estimated Seepage Loss" is automatically carried over from the "Seepage Loss" sheet.
Estimated Evaporation Loss (AF)	1.1	The "Estimated Evaporation Loss" is automatically carried over from the "Evaporation Loss" sheet.
Total Volume Required (AF)	4.6	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.

State of Idaho
Department of Water Resources
Attachment to Field Exam
96-9433

WILDLIFE STORAGE / SYSTEM DIAGRAM

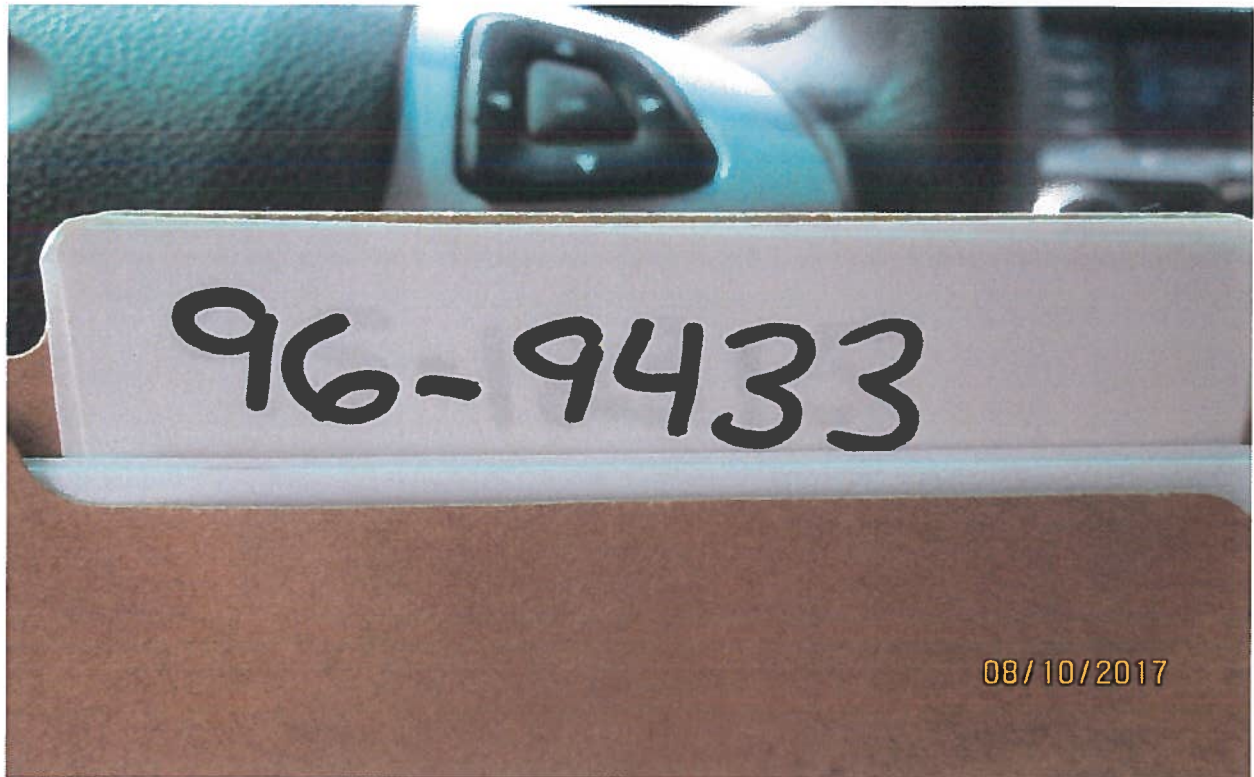
01W



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

0 0.035 0.07 0.14 Miles





Outlet from pond to Boyer Slough.



Outlet of pond facing Boyer Slough.

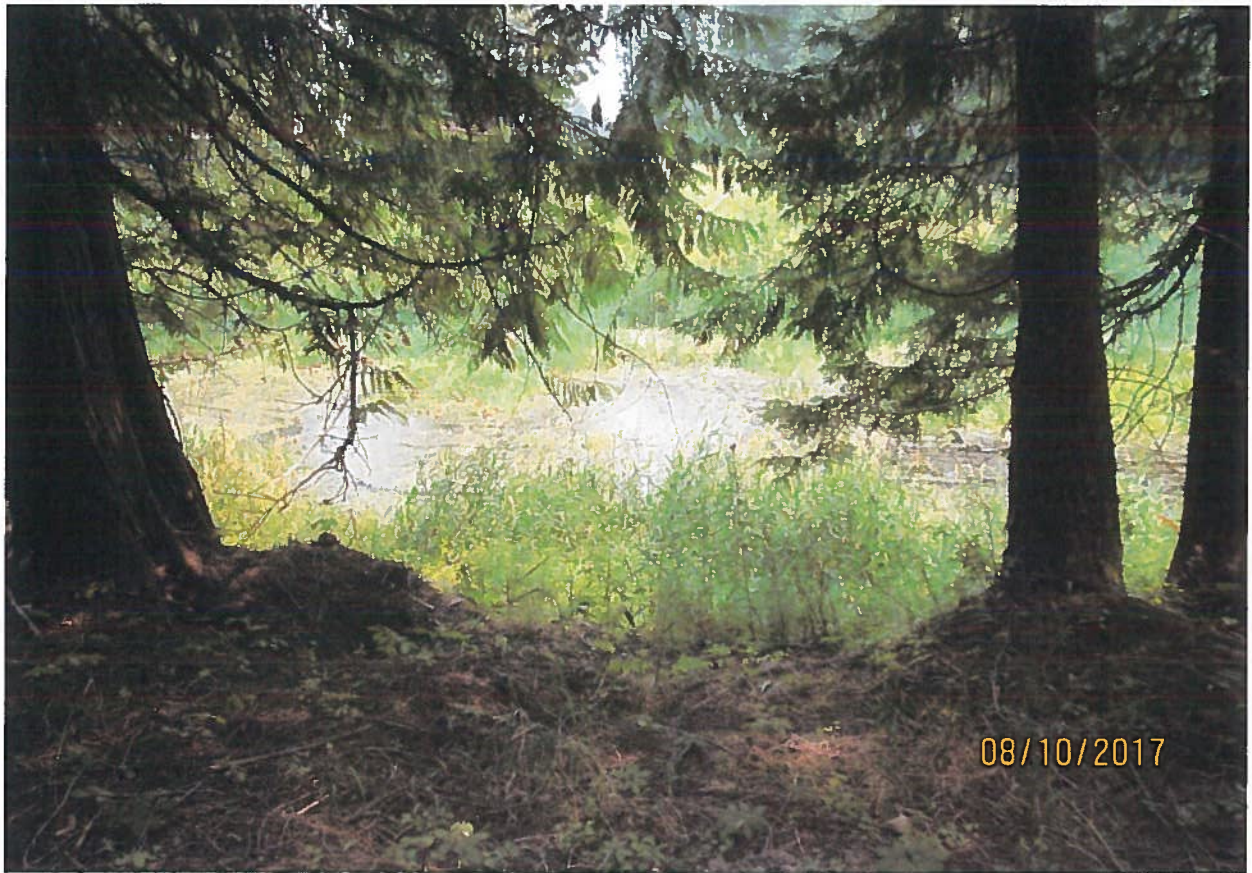


Standing on dam looking north.



Place of use.





Place of use.

