

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 96-9588
Exam Date: 05/25/2021

1. Current Owner:
MARK WATSON 105 VERMEER DR UNIT 2 STE 170 PONDERAY ID 83852-9802 AND/OR
REBECCA REVAK 105 VERMEER DR UNIT 2 STE 170 PONDERAY ID 83852-9802
2. Accompanied by: Mark Watson
Phone No: 208-597-0627
Address: Same as above
Relationship to permit Holder: Permit holder

3. **SOURCE:**
UNNAMED STREAM

Tributary
SAND CREEK

Method of Determination: Arcmap and DRG.

B. OVERLAP REVIEW

1. Other water rights with the same place of use: YES Overlap

Water Right No.	Source	Purpose of Use	Basis
96-4095	SPRINGS	STOCKWATER, DOMESTIC	STATUTORY CLAIM

Comments: Statutory Claim 96-4095 was filed for stockwater and domestic uses, but has not been validated by the Department, and is not an overlap concern for this pond's beneficial use of storage water.

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 SW¼ SE¼, Sec. 26, Twp 58N, Rge 02W, B.M. BONNER County

Method of Determination: GPS; POD is an earthen dam with overflow culvert located at -116°33.439, 48°20.711

PLACE OF USE: WILDLIFE STORAGE, RECREATION 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	
58N	02W	26															X		
58N	02W	26															X		

Method of Determination: Field exam and Arcmap aerial imagery.

3. Delivery System Diagram Attached (required). Indicate all major components and distances between components.
X Indicate weir size/pipe as applicable.
- X 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

4.

Well or Diversion ID No.*	Motor Make	Hp	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size
N/A					

D. FLOW MEASUREMENTS

1.

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

2. Measurements: N/A

E. FLOW CALCULATIONS

Measured Method: N/A

F. VOLUME CALCULATIONS

1. Volume Calculations for irrigation: N/A
2. Volume Calculations for Other Uses: See attached pond analysis worksheet.

G. NARRATIVE/REMARKS/COMMENTS

Field exam performed on 5/25/2021 with the applicant, Mark Watson, showed a pond which impounds unnamed stream water for the following storage uses: wildlife, recreation, and fire protection. The POD is an excavated earthen dam with an overflow discharge culvert that routes beneath a roadway to the east of the pond. This is an in-stream pond and there is no diversion rate associated with this permit.

Photographs and map sketches of the pond were taken during the field exam to illustrate the inflow of water to the pond, and the pond that serves as the multiple storage use POU. Following the exam, Arcmap aerial imagery was used to trace out the surface area of the pond, which equals 0.2 acres. The pond has a maximum depth of 12 feet, an average depth of 4.8 feet, pond capacity of 1.0 af, and a seepage & evaporation loss of 1.7 af annually. The total volume required equals 2.7 af annually, which is applied as annual volume(s) to each of the three beneficial uses but is not additive in nature. The maximum diversion volume recommended for licensing purposes equals **2.7 af**. The immediate area surrounding the pond is very lush and green, as the pond sits in a natural depression, but no additional water channels were identified during the exam that feed into the pond. It is possible the pond benefits from a groundwater source, but as the pond was on the property when purchased by the applicant, there is no conclusive evidence to support this nor did the applicant apply for groundwater as a source. As a result the current pond analysis worksheet includes the seepage volume associated with the fine sands, silt loam, and very fine sandy loam soil type in the area.

Conditions 26A, 082, and 029 were removed from the permit during licensing review. Conditions 219 and 220 were revised to reflect pond volume data following the field exam and current pond analysis worksheet development. All other conditions on the permit shall be carried forward to licensing. Overlap concerns: Statutory Claim 96-4095 was filed for stockwater and domestic uses, but has not been validated by the Department, and is not an overlap concern for this pond's beneficial use of storage water. There are no additional 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	2.7 AF
RECREATION STORAGE	01/01 to 12/31	2.7 AF
FIRE PROTECTION STORAGE	01/01 to 12/31	2.7 AF

Totals: 2.7 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

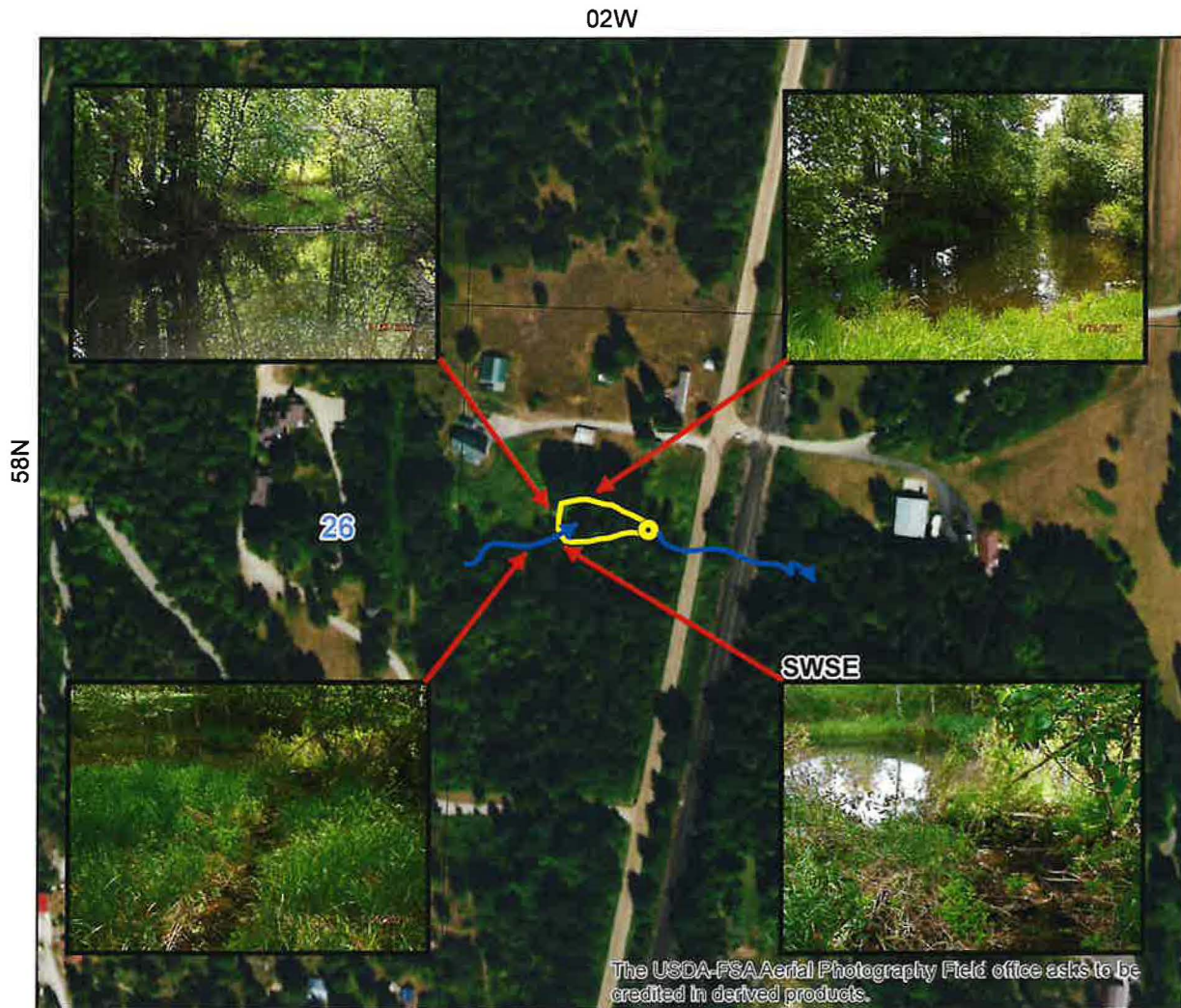
I. AUTHENTICATION Luke Bates - Water Resource Agent

Field Examiner's Name  Date 8/19/2021

Reviewer  Date 10/21/2021

State of Idaho
Department of Water Resources
Attachment to Field Exam
96-9588

WILDLIFE STORAGE, RECREATION STORAGE, and FIRE PROTECTION STORAGE system diagram.



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

0 0.035 0.07 0.14 Miles



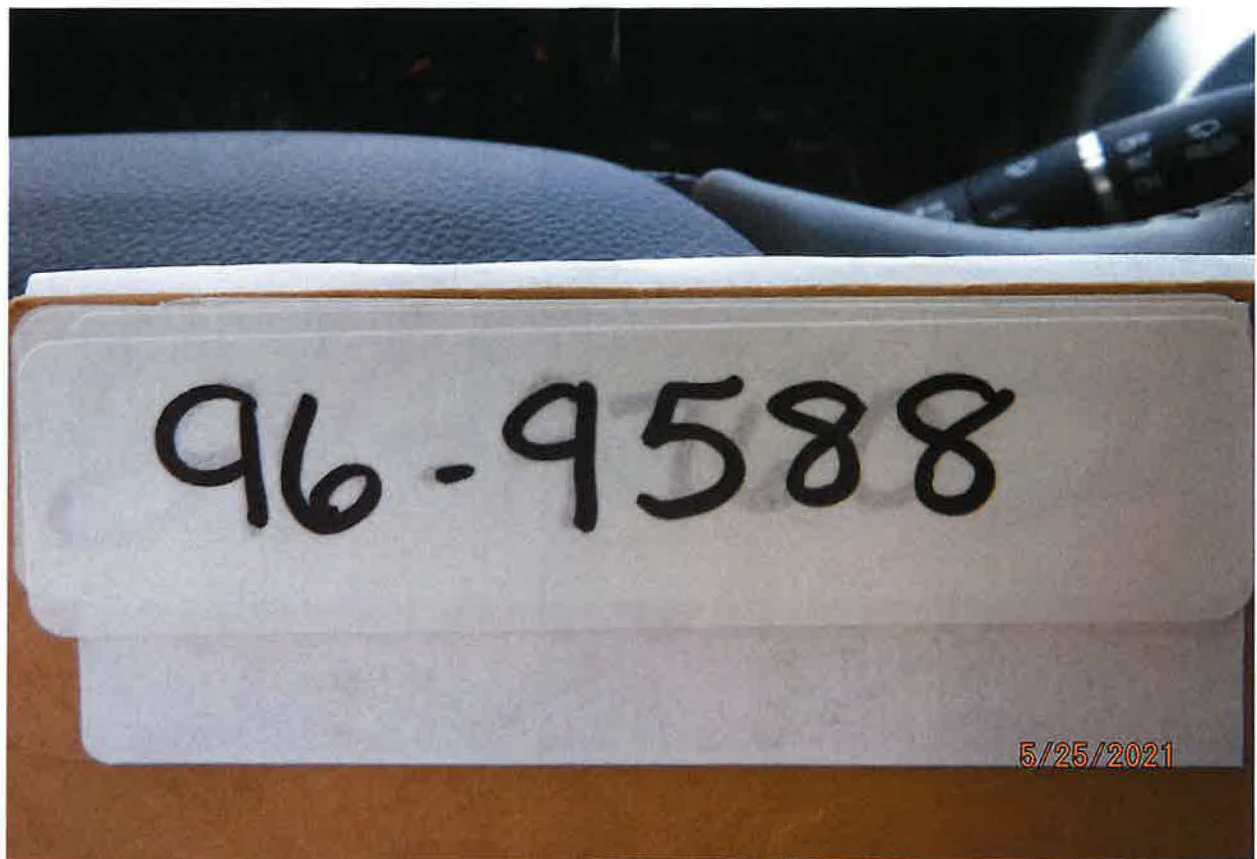
Total Storage Calculations

FILE NUMBER	96-9588
REVIEWER	LUKE BATES
DATE	8/18/2021

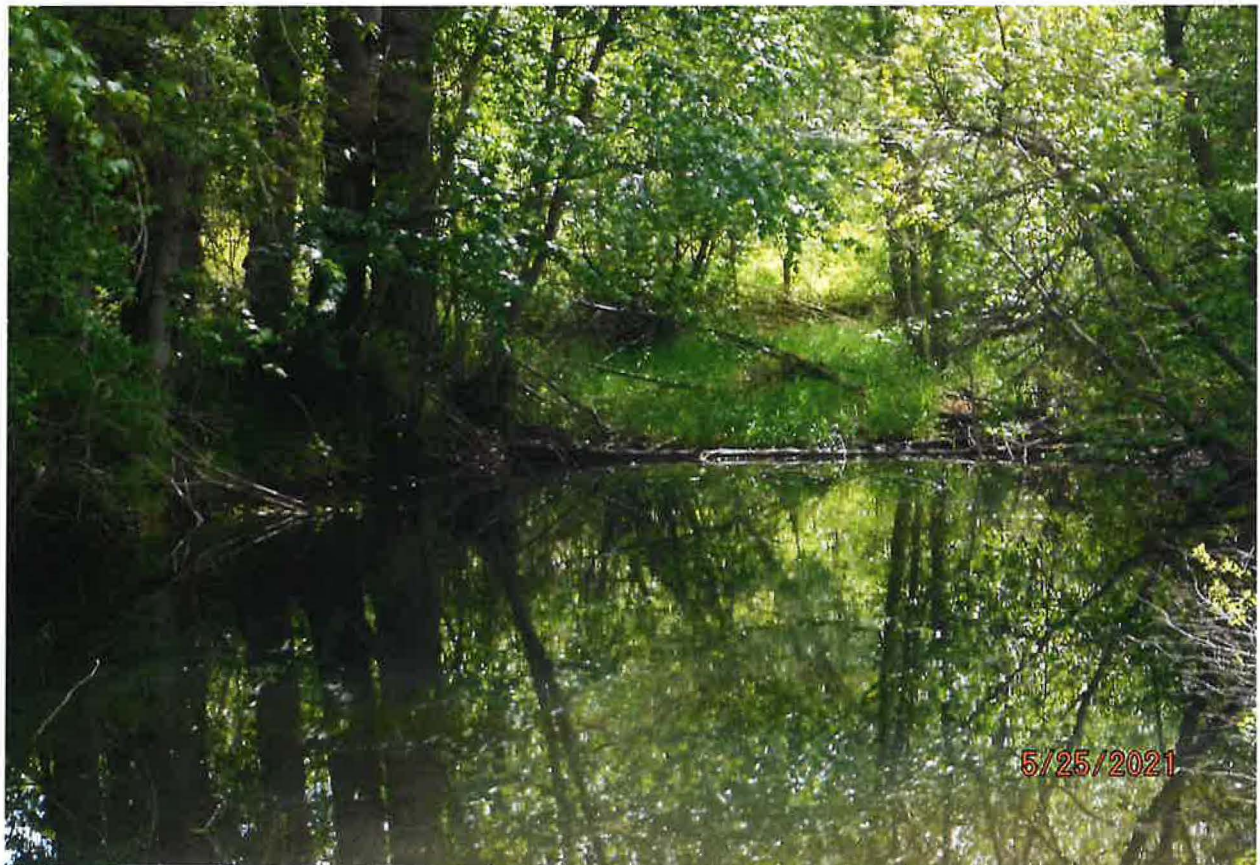
This spreadsheet has been designed by Idaho Department of Water Resources to estimate the total seepage, evaporation and fill capacity required for a pond.

User Input
Calculated value
Formula Explanations

Surface Area (AC.)	0.2	"Surface Area" is automatically carried over from the "Seepage Loss" sheet.
Average Pond Depth (FT.)	4.8	"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)	1.0	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)	1.5	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)	2.7	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.



FIELD EXAM DATE 5/25/2021



POD – EARTHEN POND DAM



UNNAMED STREAM INFLOW TO STORAGE POND



RECREATION STORAGE, WILDLIFE STORAGE, & FIRE PROTECTION STORAGE POU – POND



RECREATION STORAGE, WILDLIFE STORAGE, & FIRE PROTECTION STORAGE POU – POND