

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 87-11365
Exam Date: 03/23/2021

1. Current Owner:
GARY J PRESOL PO BOX 585 STERLING AK 99672-0585
2. Accompanied by: Garrett Presol
Phone No: 208-882-1843
Address: 1044 Shultz Rd, Moscow ID 83843
Relationship to permit Holder: Representative/Son

3. **SOURCE:**
UNNAMED STREAM

Tributary
IDLERS REST CREEK

Method of Determination: Arcmap and DRG

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 SW¼, Sec. 22, Twp 40N, Rge 05W, B.M. LATAH County

Method of Determination: GPS; POD is an earthen dam located at -116°57.2551, 46°47.4463.

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	
40N	05W	22												X					

Method of Determination: Field Exam and 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
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 3/23/2021 with the applicant's representative, Garrett Presol, showed a pond that captured water from an unnamed stream that is used for wildlife storage purposes. The POD is an excavated earthen dam situated in a small draw designed to impound stream water. A natural side channel at the northwest corner of the dam allows overflow discharge to route downgrade from the dam back to the historic stream channel. There is no diversion rate associated with this permit.

Photographs were taken during the field exam to illustrate the storage pond that serves as the POU for wildlife storage. Following the exam, Arcmap aerial imagery was used to trace out the surface area of the pond equaling 1.1 acres. The surface area is 0.1 acres smaller than the permit was approved for, due to a small island in the pond being excluded from the total surface acreage. The pond has a maximum depth of 20 feet, an average depth of 8 feet, pond capacity of 8.8 af, and a seepage & evaporation loss of 2.8 af annually. The total volume required equals 11.6 af annually. The recommended maximum diversion volume for licensing purposes equals **11.6 af**. The recommended volume at licensing is less than the permit approved volume, resulting from a reduction in surface area

which factors into the pond analysis worksheet. During the exam, Mr. Presol stated deer and other wildlife regularly use the pond, as well as numerous waterfowl throughout the year.

Condition 029 was removed from the permit during licensing review. 259 was replaced with 219, in order to describe the storage pond that doesn't have multiple fill uses. 220 was updated to reflect accurate pond surface area and capacity following the field exam. All other conditions on the permit will be carried forward to licensing. 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	11.6 AF

Totals: 11.6 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

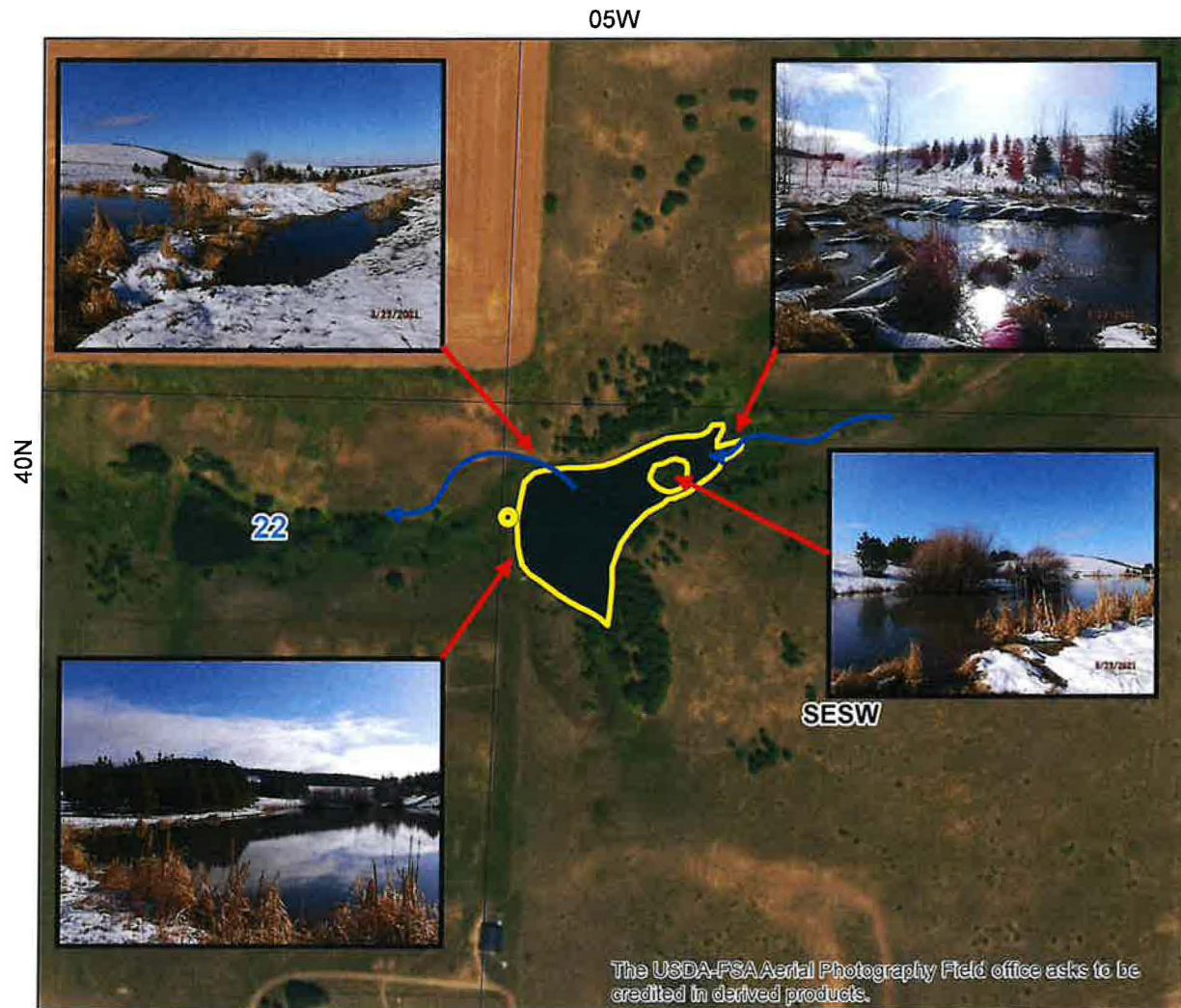
I. AUTHENTICATION Luke Bates - Water Resource Agent

Field Examiner's Name *Luke Bates* Date 3/29/2021

Reviewer *Ad Fink* Date 5/21/2021

State of Idaho
Department of Water Resources
Attachment to Field Exam
87-11365

WILDLIFE STORAGE system diagram.



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

0 0.035 0.07 0.14 Miles



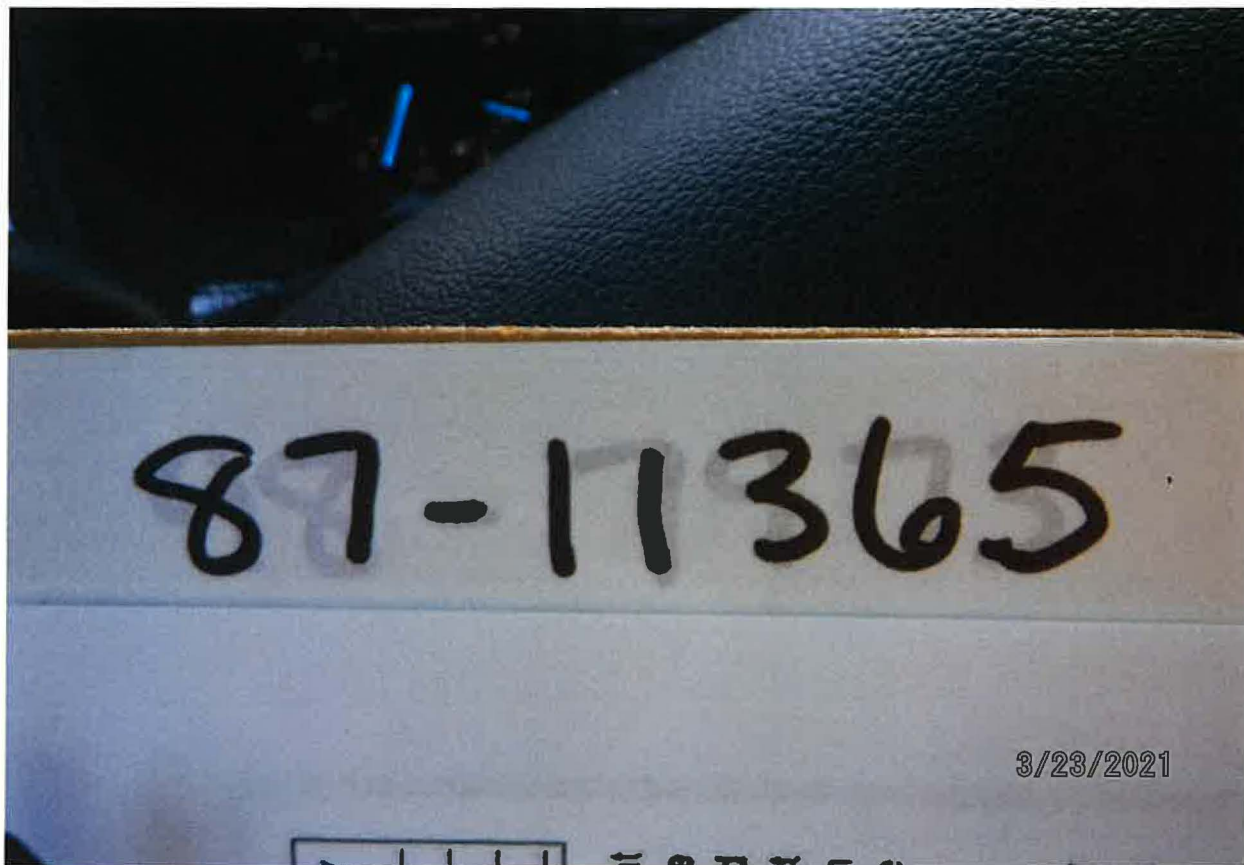
Total Storage Calculations

FILE NUMBER	87-11365
REVIEWER	LUKE BATES
DATE	3/29/2021

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.)	1.1	"Surface Area" is automatically carried over from the "Seepage Loss" sheet.
Average Pond Depth (FT.)	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)	8.8	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)	1.3	The "Estimated Seepage Loss" is automatically carried over from the "Seepage Loss" sheet.
Estimated Evaporation Loss (AF)	1.5	The "Estimated Evaporation Loss" is automatically carried over from the "Evaporation Loss" sheet.
Total Volume Required (AF)	11.6	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.



FIELD EXAM DATE – 3/23/2021



POND POD – EARTHEN DAM



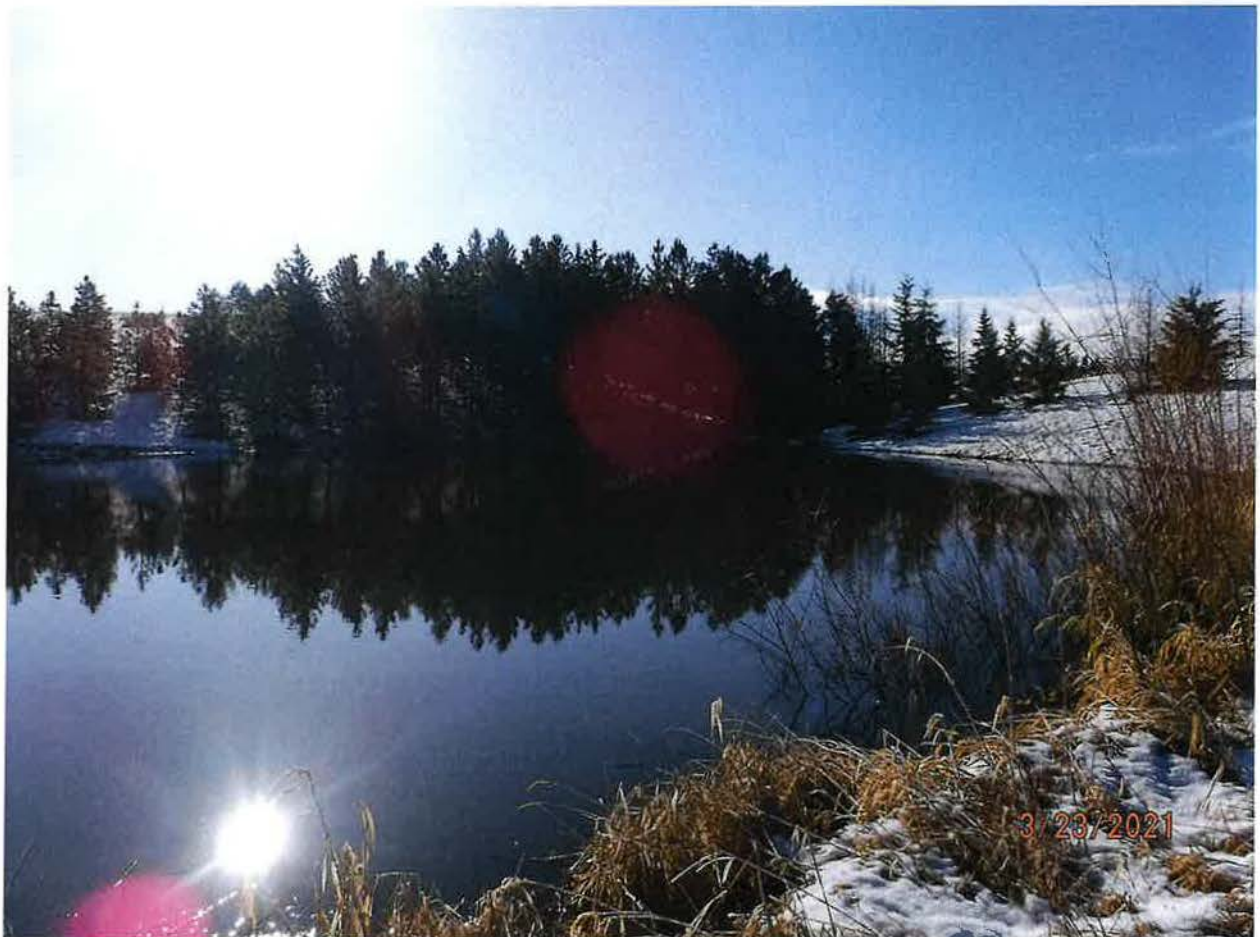
OVERFLOW DISCHARGE CHANNEL AT NORTHWEST CORNER OF POND



UNNAMED STREAM INFLOW TO POND



POU - WILDLIFE STORAGE POND





POU – WILDLIFE STORAGE



POU – WILDLIFE STORAGE – SMALL ISLAND IN POND