

STATE OF IDAHO  
DEPARTMENT OF WATER RESOURCES  
BENEFICIAL USE FIELD REPORT

**A. GENERAL INFORMATION**

Permit No: 95-17153  
Exam Date: 07/25/2018

1. Current Owner:  
BRET BOSTER 15807 N HAUSER LAKE RD HAUSER ID 83854
2. Accompanied by: Sharon Hayes  
Phone No: (208) 818-5293  
Address: Same as above  
Relationship to permit Holder: Applicants representative

3. **SOURCE:**  
GROUND WATER

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
95-7463	GROUND WATER	MUNICIPAL	DECREED
95-2189	GROUND WATER	MUNICIPAL	DECREED
95-8535	GROUND WATER	MUNICIPAL	DECREED

Comments: Water Rights 95-7463, 95-2189, and 95-8535 are for municipal water use for Hauser Lake Water Assn.

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:**

GROUND WATER NE¼ NW¼, Sec. 7, Twp 51N, Rge 05W, B.M. KOOTENAI County  
GROUND WATER SE¼ SW¼, Sec. 6, Twp 51N, Rge 05W, B.M. KOOTENAI County  
GROUND WATER NE¼ NW¼, Sec. 7, Twp 51N, Rge 05W, B.M. KOOTENAI County  
GROUND WATER SE¼ SW¼, Sec. 6, Twp 51N, Rge 05W, B.M. KOOTENAI County

Method of Determination: Map and GPS.

**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	
51N	05W	6												X					
51N	05W	7					X												

Method of Determination: Arcmap.

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:

$$V_{IR} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) =$$

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

$$V = \text{Smaller of } V_{IR} \text{ and } V_{DR} =$$

2. Volume Calculations for Other Uses:

See attached pond analysis sheets.

**G. NARRATIVE/REMARKS/COMMENTS**

The field exam was performed on 07/25/2018 with Sharon Hayes, a resident at the applicant's property. The exam showed two ponds that were being fed by ground water. Photography at date of field exam shows beneficial use.

The original application listed two separate unnamed stream PODs, and two separate Hauser Creek PODs as sources. The sources unnamed stream and Hauser Creek was removed from license as there was no evidence of them feeding the ponds. The four groundwater PODs should be sufficient to provide pond recharge annually.

Pond 1 has a surface area of 9.3 acres with an average depth of 4 feet, and estimated evaporation of 9.5 af. Pond 2 has a surface area of 1.7 acres with an average depth of 4 feet, and estimated evaporation of 1.7 af. Both ponds have islands which were traced out and surface area subtracted from the overall shape size in acres. Both ponds were excavated and do not have active dam(s). Water is fed by ground water, which is influenced by Hauser Lake. Because no diversion was found from the unnamed streams and Hauser Creek, wildlife as a cfs and diversion to storage were removed from the license. Pond analysis tool was used to determine the annual volume for both ponds. The volume is less than what was applied for because the pond analysis tool is more accurate than previous methods of determination. The overall license will be issued with an annual volume of 55.2 af for wildlife storage.

Condition 082 will be removed from the license as it is no longer needed. Condition 219 was modified using current values from pond analysis sheet. There are three other water rights in the place of use (95-2203, 95-7463, 95-2189, 95-8535). Water rights 95-7463, 95-2189, and 95-8535 uses water for municipal purposes with the Hauser Lake Water Assn. There are no overlap concerns.

Have conditions of permit approval been met? ☒ 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		55.2 AF

Totals: 55.2 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

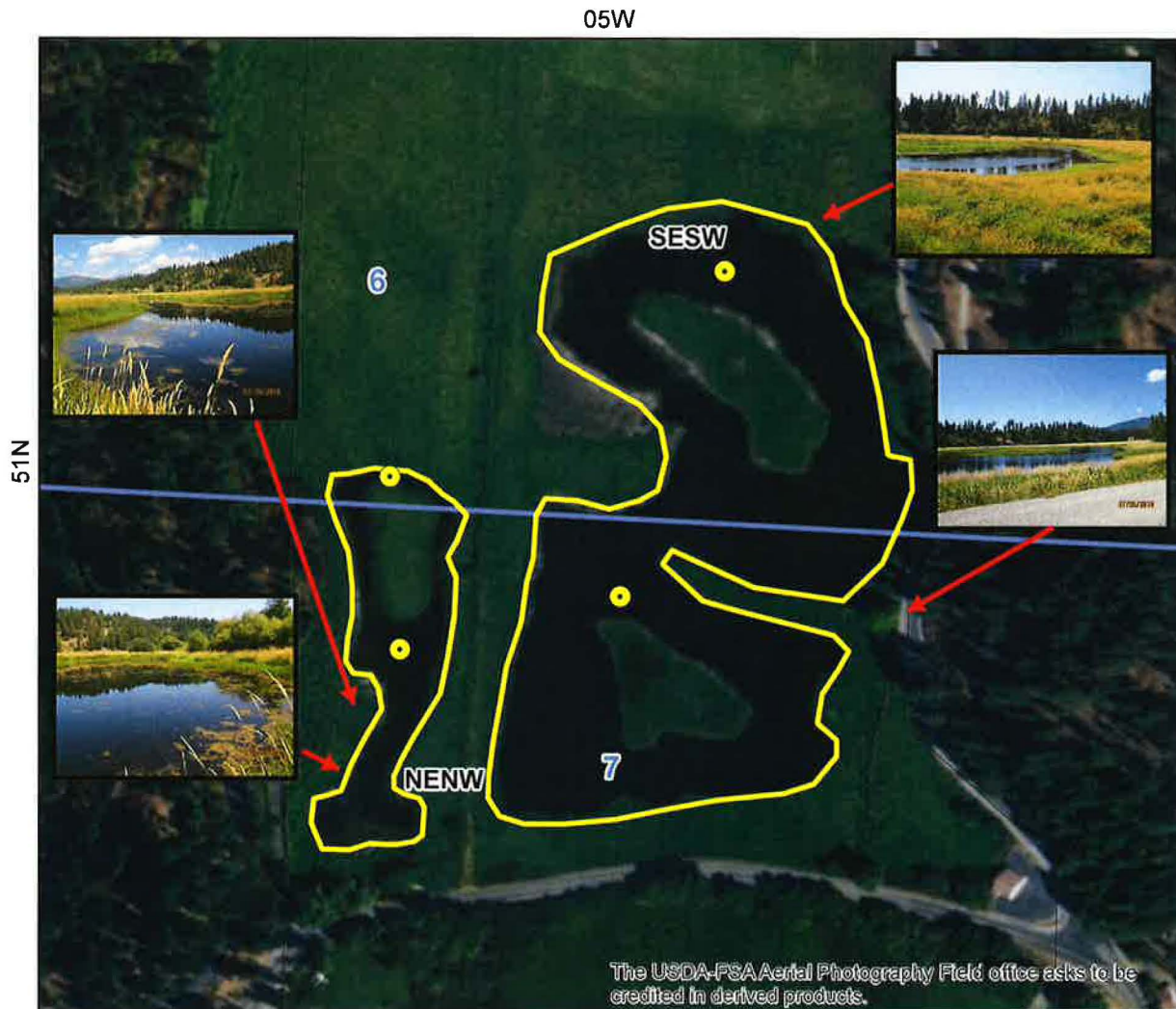
**I. AUTHENTICATION**

Luke Bates - Water Resource Agent

Field Examiner's Name Ann Fink Date 3/23/2020  
 Reviewer BDR Date 3/23/2020

State of Idaho  
Department of Water Resources  
**Attachment to Field Exam**  
95-17153

WILDLIFE STORAGE system diagram.



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

0 0.0375 0.075 0.15 Miles



## Total Storage Calculations (Pond 1)

FILE NUMBER	95-17153
REVIEWER	Luke Bates
DATE	3/23/2020

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.)	9.3	"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)	37.2	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. <b>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.</b>
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). <b>Note: You must have a "From Storage" component exceeding the initial fill on the permit to include a volume in this space.</b>
Estimated Seepage Loss (AF)	0.0	The "Estimated Seepage Loss" is automatically carried over from the "Seepage Loss" sheet.
Estimated Evaporation Loss (AF)	9.5	The "Estimated Evaporation Loss" is automatically carried over from the "Evaporation Loss" sheet.
Total Volume Required (AF)	46.7	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.

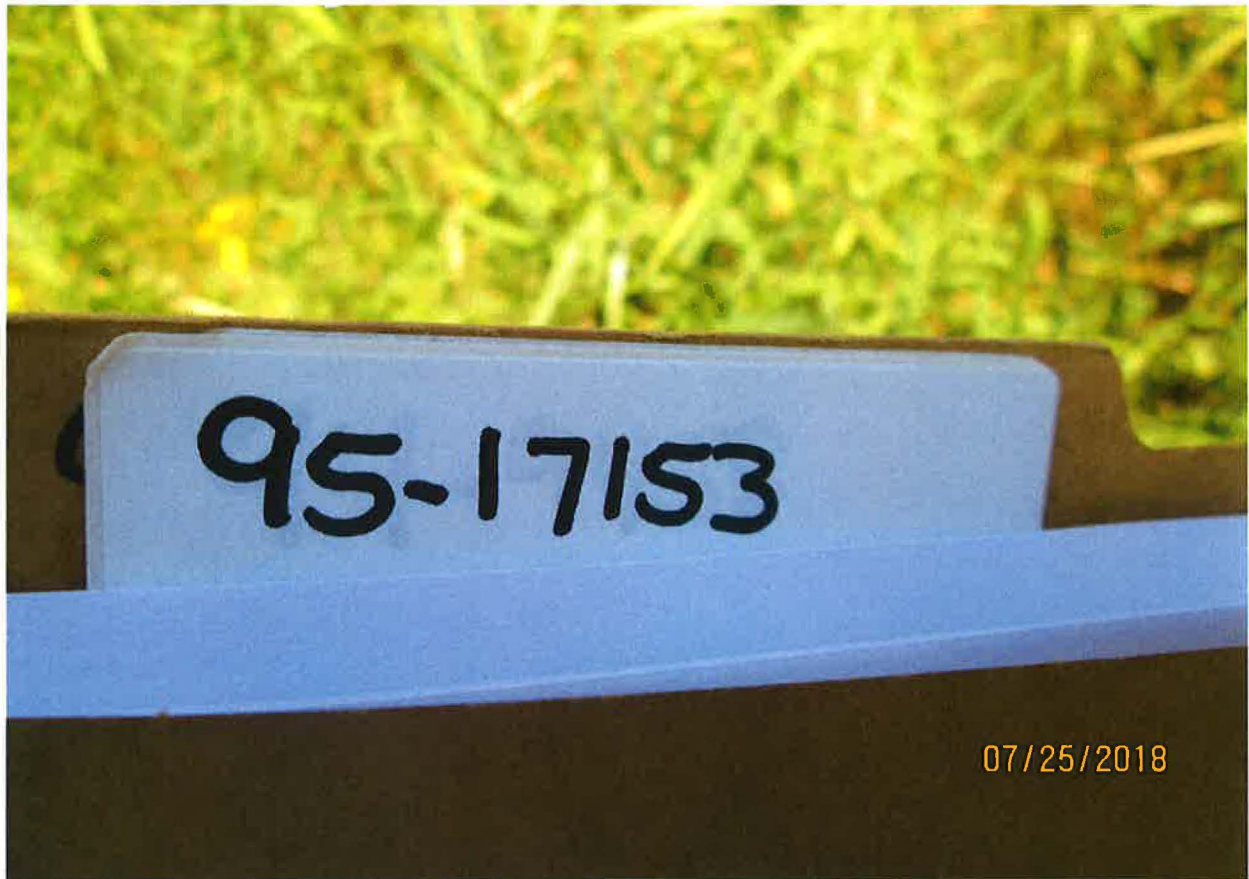
## Total Storage Calculations (Pond 2)

FILE NUMBER	95-17153
REVIEWER	Luke Bates
DATE	3/23/2020

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.)	1.7	"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)	6.8	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. <b>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.</b>
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). <b>Note: You must have a "From Storage" component exceeding the initial fill on the permit to include a volume in this space.</b>
Estimated Seepage Loss (AF)	0.0	The "Estimated Seepage Loss" is automatically carried over from the "Seepage Loss" sheet.
Estimated Evaporation Loss (AF)	1.7	The "Estimated Evaporation Loss" is automatically carried over from the "Evaporation Loss" sheet.
Total Volume Required (AF)	8.5	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.



POU



POU





POU



POU with waterfowl



POU



POU with waterfowl