

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 96-9793
Exam Date: 04/20/2021

1. Current Owner:
TERRY ALAN THURLOW 12963 W PINE ST SANDPOINT ID 83864-7331
2. Accompanied by: Unaccompanied with permission from Mr. Thurlow
Phone No: 208-597-3420
Address: Same as above
Relationship to permit Holder: Permit holder

3. **SOURCE:**
UNNAMED STREAM

Tributary
HORNBY 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 SYSTEM

1. **LOCATION OF POINT(S) OF DIVERSION:**
UNNAMED STREAM SE¼ SW¼, Sec. 19, Twp 57N, Rge 02W, B.M. BONNER County

Method of Determination: GPS; pond earthen dam is located at -116°37.616, 48°16.045

PLACE OF USE: AESTHETIC 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	
57N	02W	19												X					

Method of Determination: Field exam, photographs, and Arcmap aerial imagery.

3.
 - X Delivery System Diagram Attached (required). Indicate all major components and distances between components. 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 was performed on 4/20/2021 with authorization from the applicant, Terry Thurlow, to conduct the exam unaccompanied. The drive by exam showed an in-stream pond that impounds water from an unnamed stream for aesthetic use. Photographs were taken that illustrate the beneficial use. The POD is an earthen dam with a rock flow through channel in the center of the small pond allowing water to continue down channel.

During licensing review, Arcmap aerial imagery was used to trace out the small pond serving as the aesthetic storage POU, which is not clearly identifiable in the 2019 year imagery layer. The pond has a surface area of 0.06 acres, pond capacity of 0.1 af, a maximum depth of 5 feet, an average depth of 2 feet, a seepage and evaporation loss volume of 0.2 af, and a total volume required equal to 0.3 af. The annual volume of **0.3 af** is also recommended as the maximum diversion volume for licensing purposes.

There was evidence of livestock watering from the pond, and a follow-up phone conversation with Mr. Thurlow identified he does allow cattle on his property to drink from the stream and pond. The applicant is pursuing a new application for permit for stockwater storage as of the time of licensing review.

Conditions 029 and 26A were removed from the permit during licensing review. All other conditions from the permit will be carried forward to the license. 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>
AESTHETIC STORAGE	01/01 to 12/31	0.3 AF

Totals: 0.3 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 4/22/2021

Reviewer  Date 4/27/2021

State of Idaho
Department of Water Resources
Attachment to Field Exam
96-9793

AESTHETIC STORAGE system diagram.



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

0 0.035 0.07 0.14 Miles



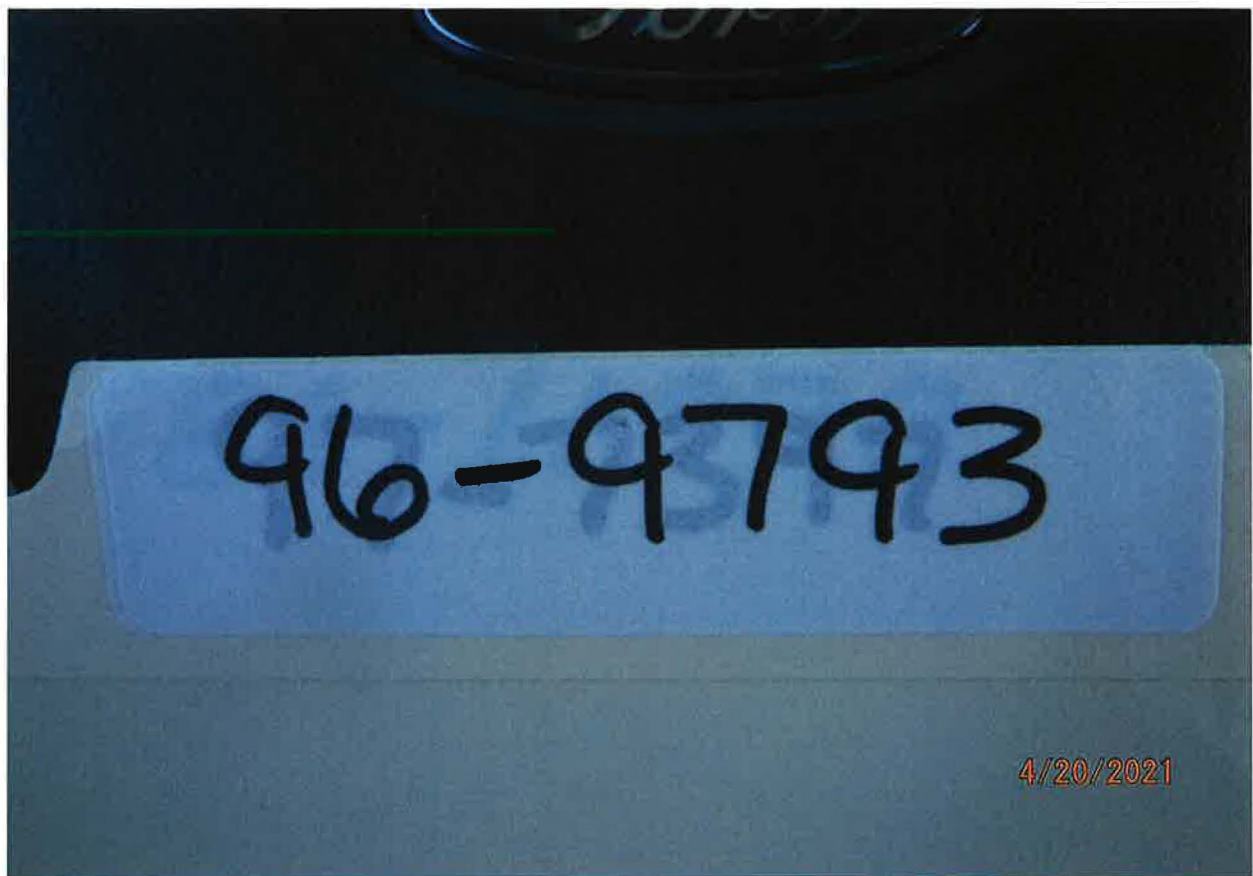
Total Storage Calculations

FILE NUMBER	95-9793
REVIEWER	LUKE BATES
DATE	4/22/2021

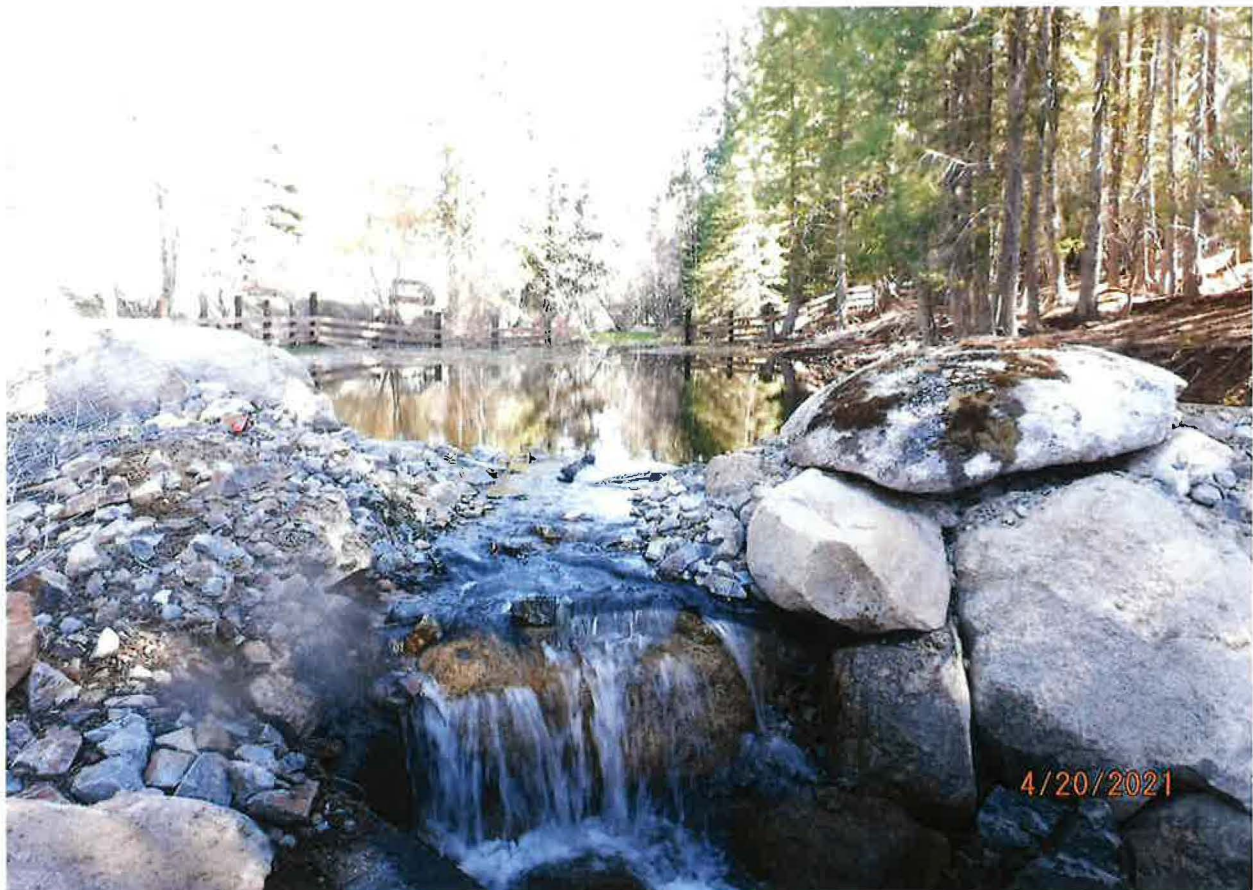
This spreadsheet has been designed by Idaho Department of Water Resources to estimate the total seepage, evaporation and fill capacity required for a pond.

User Input
Calculated value
Formula Explanations

Surface Area (AC.)	0.06	"Surface Area" is automatically carried over from the "Seepage Loss" sheet.
Average Pond Depth (FT.)	2	"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)	0.1	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)	0.1	The "Estimated Seepage Loss" is automatically carried over from the "Seepage Loss" sheet.
Estimated Evaporation Loss (AF)	0.1	The "Estimated Evaporation Loss" is automatically carried over from the "Evaporation Loss" sheet.
Total Volume Required (AF)	0.3	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.



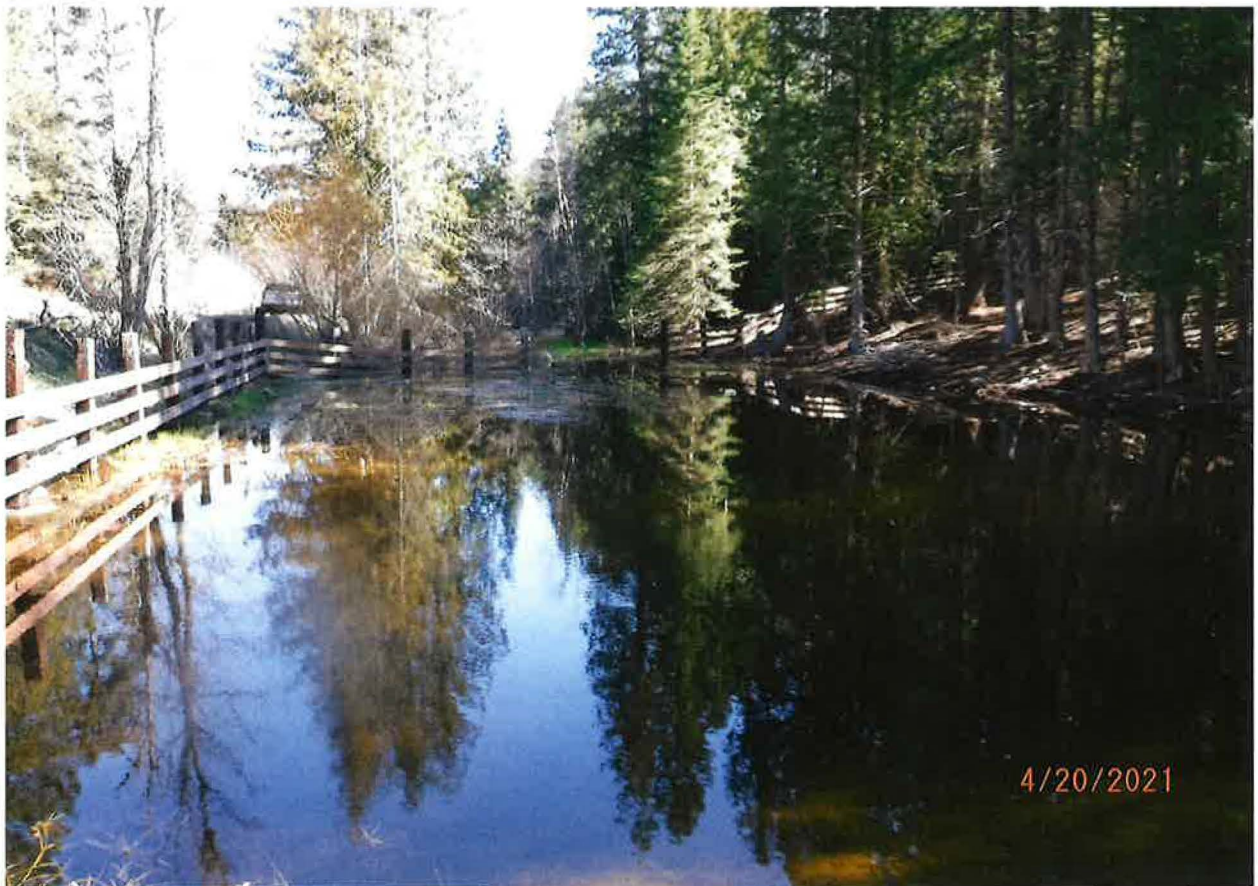
FIELD EXAM DATE – 4/20/2021



POD – POND DAM WITH FLOW THROUGH CHANNEL FOR IN-STREAM POND



INFLOW FROM STREAM



AESTHETIC STORAGE POND POU



AESTHETIC STORAGE POND POU

