

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 95-17993
Exam Date: 01/19/2021

1. Current Owner:
STIRLING FAMILY TRUST 3975 E UPPER HAYDEN LAKE RD HAYDEN ID 83835-7194
2. Accompanied by: Brian Stirling
Phone No: 208-255-6342
Address: Same as above
Relationship to permit Holder: Trustee

3. **SOURCE:**
UNNAMED STREAM

Tributary
HAYDEN LAKE

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
NUMEROUS – read below			

Comments: North Kootenai Water District has numerous water rights of which their service area and license(s) POU overlap this permit's POU. None of them utilize the unnamed stream source associated with this permit, and are not a concern for overlap.

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:**

UNNAMED STREAM SE¼ SW¼, Sec. 20, Twp 51N, Rge 03W, B.M. KOOTENAI County

Method of Determination: GPS. POD is an earthen dam located at -116°44.225, 47°44.811.

PLACE OF USE: WILDLIFE STORAGE and 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	
51N	03W	20												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
NONE					

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

F. VOLUME CALCULATIONS

1. Volume Calculations for irrigation: N/A

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

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

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

2. Volume Calculations for Other Uses:

See attached pond analysis sheet.

G. NARRATIVE/REMARKS/COMMENTS

Field exam performed on 1/19/2021 with the applicant, Brian Sterling (trustee), showed a small pond that captured water from an unnamed stream for wildlife storage and aesthetic storage uses. At the POD, a small earthen embankment served as the point of diversion, and water from the unnamed stream entered the pond with overflow discharging directly back into the stream channel along the same corner of the pond.

During the exam, the pond was observed and photographs taken to provide illustrative documentation of the pond with water system flowing. The applicant used a couple of 2 x board material and wooden bracing to line the eastern edge of the pond,

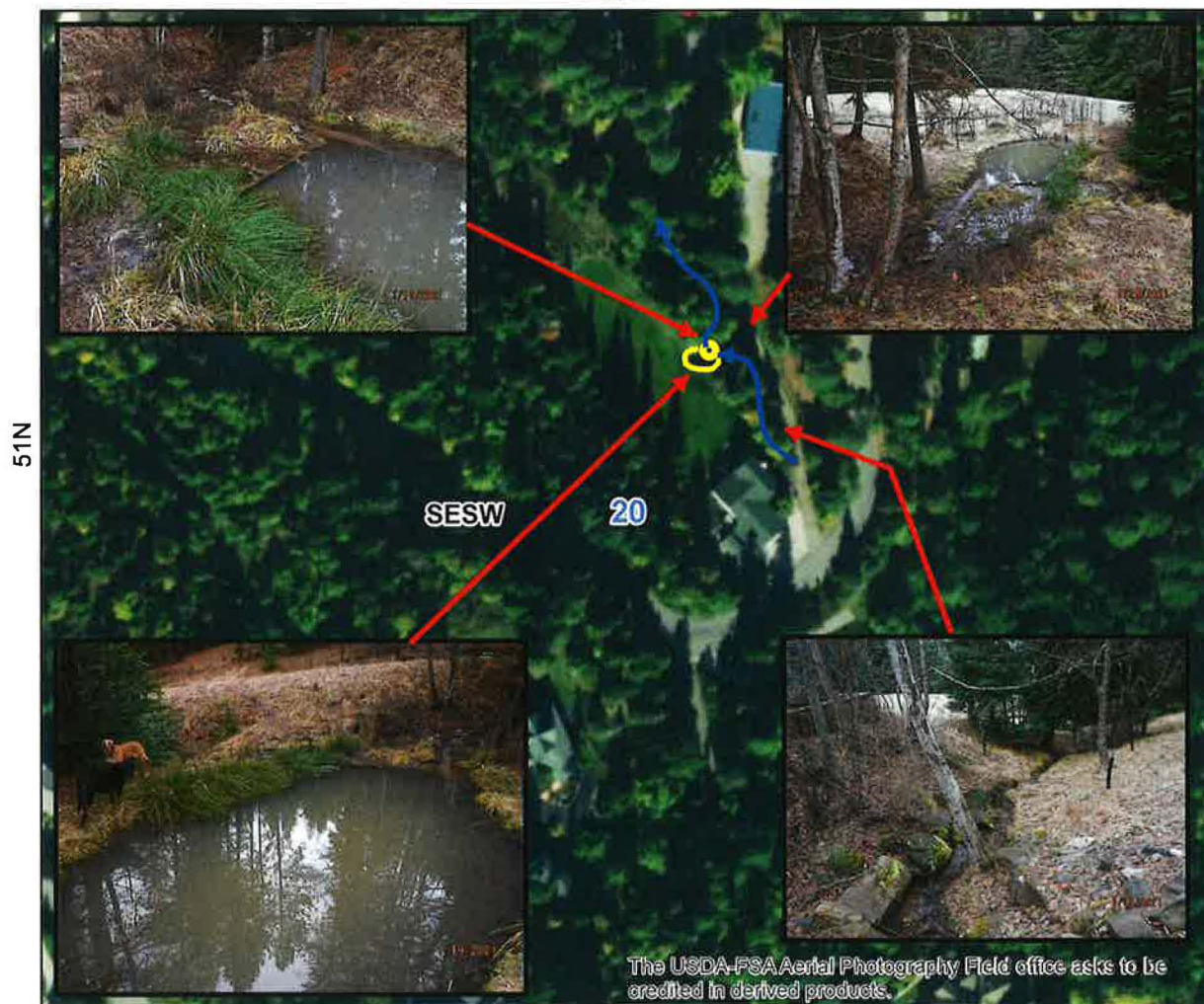
State of Idaho
Department of Water Resources

Attachment to Water Right License

95-17993

This map depicts the WILDLIFE STORAGE and AESTHETIC STORAGE place of use boundary for this water right at the time of this approval and is attached to the approval document solely for illustrative purposes.

03W



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

0 0.02 0.04 0.08 Miles



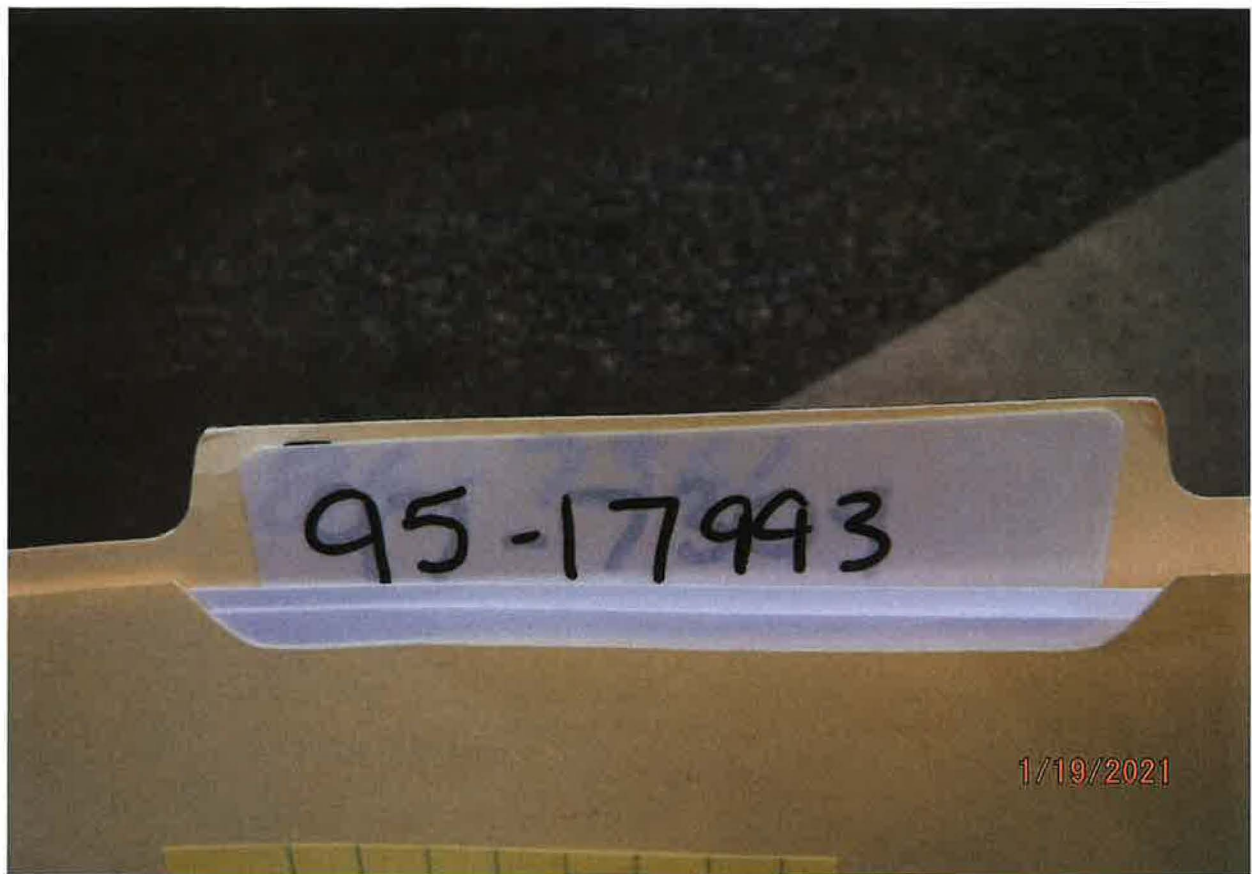
Total Storage Calculations

FILE NUMBER	95-17993
REVIEWER	Luke Bates
DATE	1/19/2021

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.)	0.1	"Surface Area" is automatically carried over from the "Seepage Loss" sheet.
Average Pond Depth (FT.)	3.2	"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)	0.3	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)	0.5	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.



FIELD EXAM DATE 1/19/2021



POD – EARTHEN DAM WITH OVERFLOW DISCHARGE (BETWEEN GREEN GRASS IN PHOTO)



UNNAMED STREAM SOURCE FLOWING DOWNGRADE TOWARD POND



WILDLIFE & AESTHETIC STORAGE(S) POU – SMALL POND



WILDLIFE AND AESTHETIC STORAGE(S) POU

