

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 98-7949

Exam Date: 07/29/2021

1. Current Owner:

DOUGLAS HOLCOMB PO BOX 731 BONNERS FERRY ID 83805-0731 AND/OR
KATHERINE HOLCOMB PO BOX 731 BONNERS FERRY ID 83805-0731

2. Accompanied by: DOUGHLAS HOLCOMB

Phone No: 208-267-4560

Address: Same as above

Relationship to permit Holder: Permit Holder

3. **SOURCE:**

UNNAMED STREAM

Tributary

MEADOW 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
98-7339	SPRINGS	DOMESTIC	LICENSE

Comments: 98-7339 uses water from a spring(s) source for domestic use with a POU that currently overlaps this right's POU but was assigned a 40-acre tract at time of license issuance. WR 98-7339 is not a concern for 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 NE¼ SE¼, Sec. 15, Twp 63N, Rge 02E, B.M. BOUNDARY County

Method of Determination: GPS. POD is a pond earthen dam; location -116°10.675, 48°48.653

PLACE OF USE: 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	
63N	02E	15													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.

Map Attached Showing Location(s) of point(s) of diversion and place(s) of use (required). Scale must be
X 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 7/29/2021 with the applicant, Douglas Holcomb, showed an in-stream pond being used for recreation storage and fire protection storage purposes. At the POD, the applicant has excavated an earthen dam to impound unnamed stream water, with a lined rock overflow channel allowing overflow discharge of water downstream. There is no diversion rate associated with this water right. The Permit was approved with the beneficial uses of stockwater/irrigation storage & from storage components, but during field exam it was validated these uses were not developed and have been removed from the Permit during licensing review.

During the field exam the storage pond was sketched out on field maps. During licensing review, Arcmap aerial imagery coupled with field notes were used to trace out the pond's surface area, which equals 0.43 acres. The pond has a max depth of 15 feet, an average depth of 6 feet, a pond capacity of 2.6 af, and an estimated seepage and evaporation loss of 31.8 af. The pond has an earthen dam which serves as the POD. Based on pond development and current pond analysis sheet calculations, the annual volume equals 34.3 af. This value is larger than the Permit was approved for, primarily based on an older pond analysis worksheet being used that did not account for soil types in the area regarding a seepage factor of 31.4 af.

Volume recommendations for licensing purposes are limited to the annual volume(s) recreation storage and fire protection storage that were permit approved, which equal 5.3 af respectively. Each storage beneficial use is not additive in nature, resulting in the recommendation of **5.3 af** maximum diversion volume for licensing purposes. During the field exam, Mr. Holcomb stated that flow through from the pond does not occur later in the summer. This supports the current pond analysis worksheets higher seepage value influencing pond levels transitioning from peak spring run off periods to late summer reduced flow periods. Depending on future water levels, re-working the pond to incorporate a liner may be needed to maintain pond water levels as desired by the applicant.

Conditions 26A, 082, 029, R58, and X02 were removed from the Permit during licensing review. Conditions 219 & 220 were updated to reflect pond size and volume values following the field exam and completion of current pond analysis worksheet. All other conditions on the Permit shall be carried forward to licensing. Overlap concerns: 98-7339 uses water from a spring(s) source for domestic use with a POU that currently overlaps this right's POU but was assigned a 40-acre tract at time of license issuance. WR 98-7339 is not a concern for overlap. Small scale irrigation < ½ acre does occur on the applicant's property, but it is covered under 98-7339's domestic use from the Spring source, which becomes the unnamed stream feeding this permits storage pond.

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>
RECREATION STORAGE	01/01 to 12/31	5.3 AF
FIRE PROTECTION STORAGE	01/01 to 12/31	5.3 AF

Totals: 5.3 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

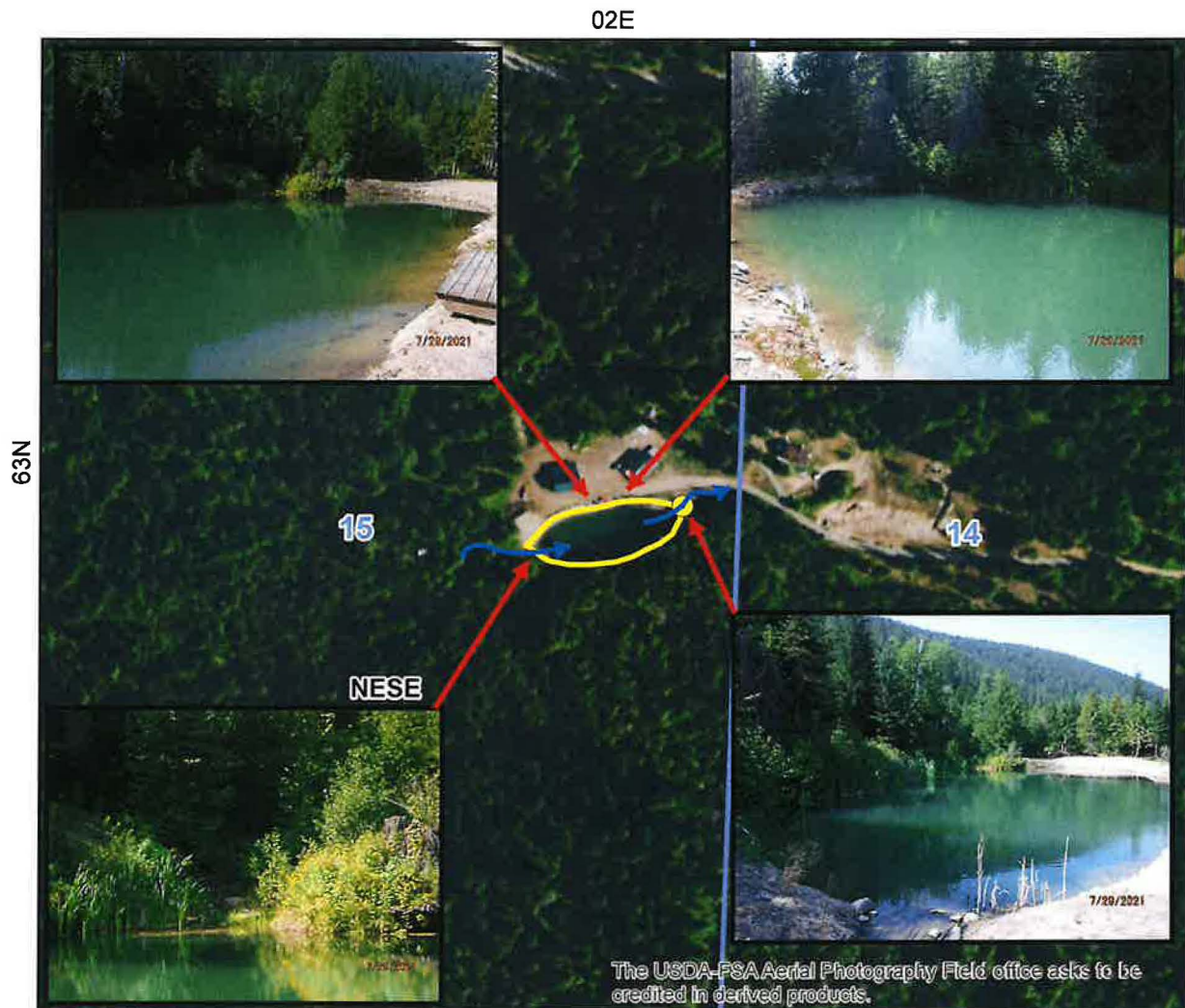
I. AUTHENTICATION Luke Bates - Water Resource Agent

Field Examiner's Name  Date 9/13/2021

Reviewer Ad En Date 10/21/2021

State of Idaho
Department of Water Resources
Attachment to Field Exam
98-7949

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

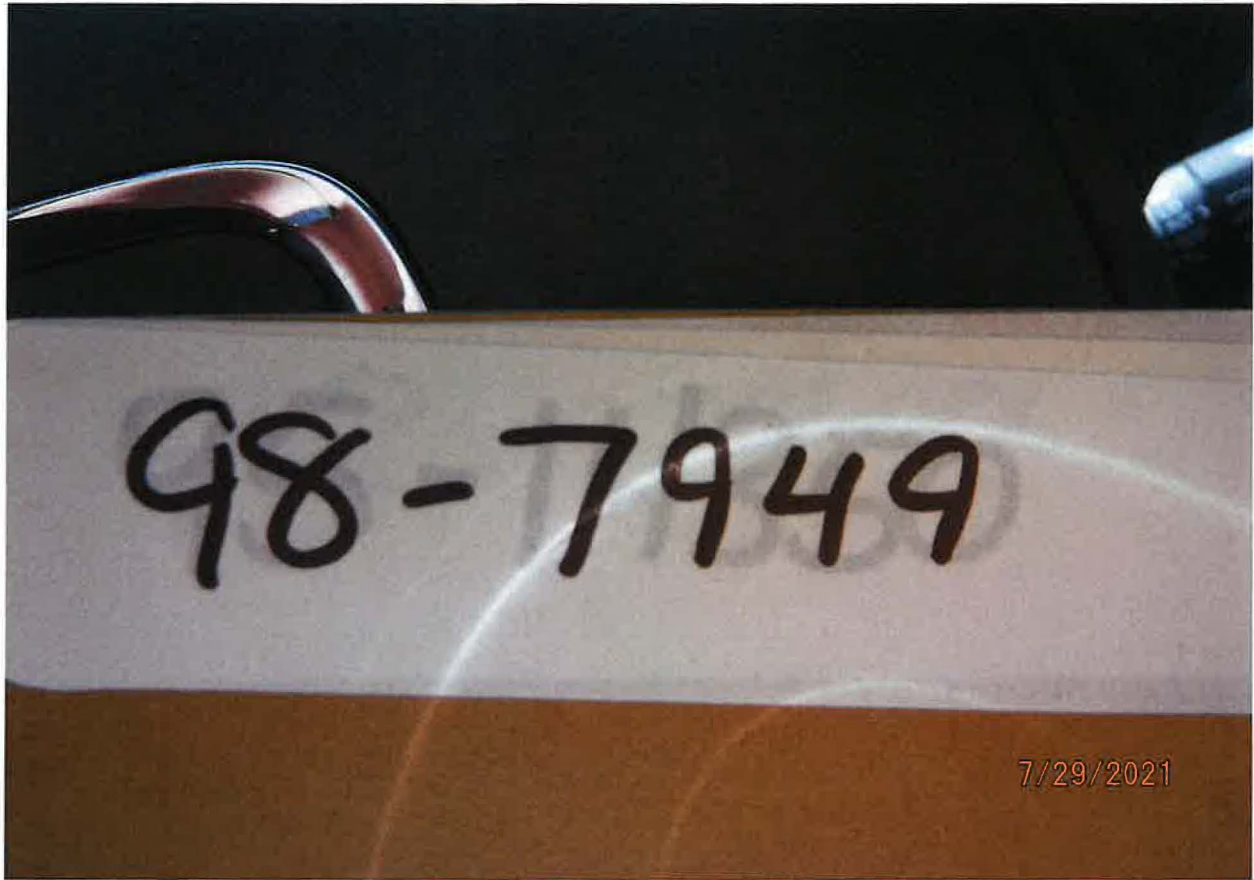
FILE NUMBER	98-7949
REVIEWER	LUKE BATES
DATE	8/27/2021

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.)	0.43	"Surface Area" is automatically carried over from the "Seepage Loss" sheet.
Average Pond Depth (FT.)	6	"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)	2.6	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 " <u>From Storage</u> " component exceeding the initial fill on the permit to include a volume in this space.
Estimated Seepage Loss (AF)	31.4	The "Estimated Seepage Loss" is automatically carried over from the "Seepage Loss" sheet.
Estimated Evaporation Loss (AF)	0.4	The "Estimated Evaporation Loss" is automatically carried over from the "Evaporation Loss" sheet.
Total Volume Required (AF)	34.3	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.



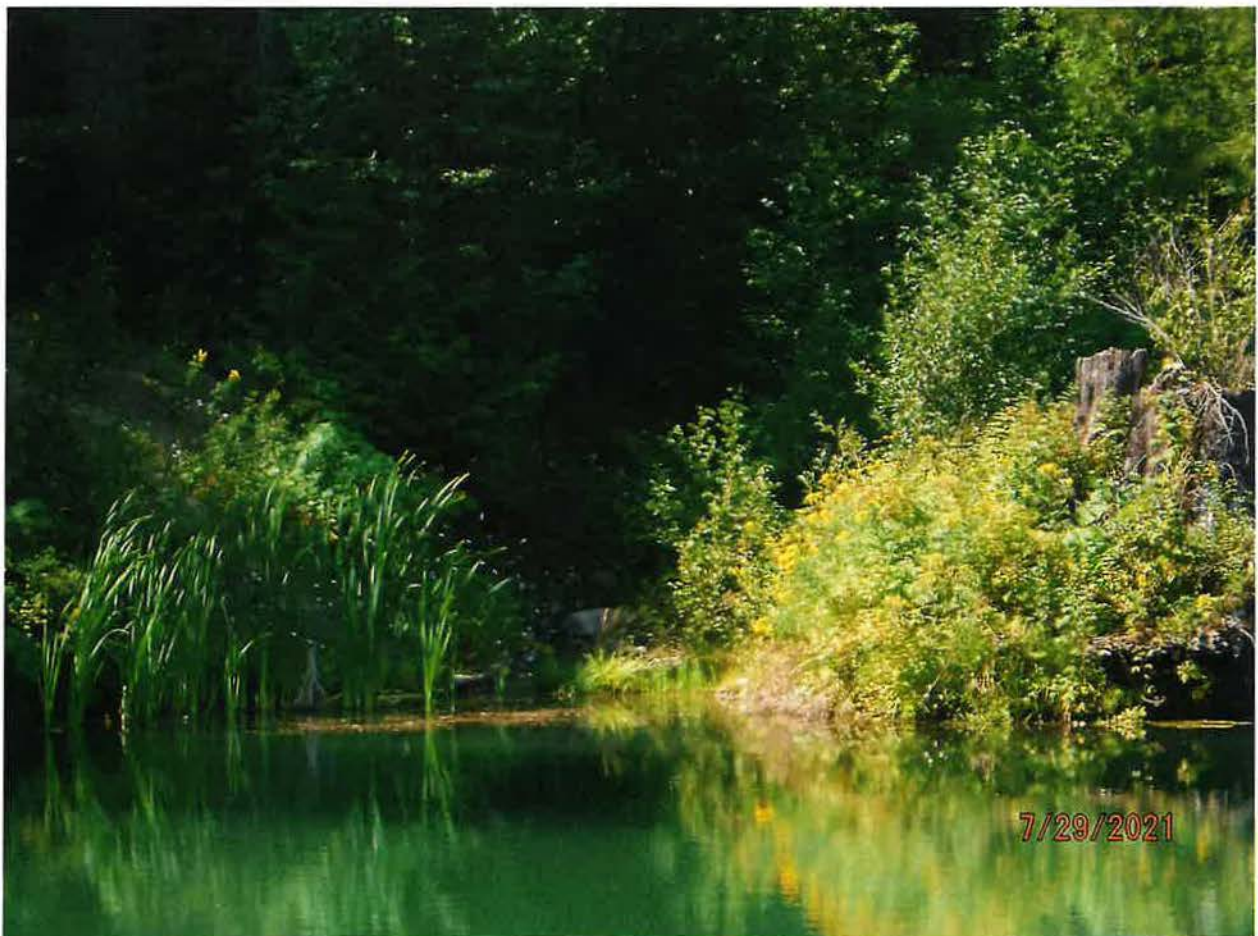
FIELD EXAM DATE 7/29/2021



POD – POND EARTHEN DAM



UNNAMED STREAM INFLOW TO POND





LINED CHANNEL OUTFLOW FROM POND TO HISTORIC STREAM CHANNEL





POU – RECREATION STORAGE & FIRE PROTECTION STORAGE POND

