

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 97-07417
Exam Date: 5/18/2005

1. Current Owner:
J D LUMBER INC PO BOX 55 PRIEST RIVER ID 83856 (208) 448-2671
2. Accompanied by: Jeff Weimer
Relationship to Permit Holder: Owner
3. **SOURCE:**
SANBORN CREEK
- TRIBUTARY:**
PRIEST RIVER

B. OVERLAP REVIEW

1. Other water rights with the same place of use: None
2. Other water rights with the same point-of-diversion: None

C. DIVERSION AND DELIVERY SYSTEM1. LOCATION OF POINT(S) OF DIVERSION:

SANBORN CREEK NE $\frac{1}{4}$ SW $\frac{1}{4}$ Sec. 3, Twp 56N, Rge 04W, B.M. BONNER County

Method of Determination: Maps and Arcmap. POD estimated to be at -116° 49.240, 48° 13.646

2.

PLACE OF USE: RECREATION STORAGE

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
56N	04W	3									X			X		X	X		

PLACE OF USE: WILDLIFE STORAGE

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
56N	04W	3									X			X		X	X		

Method of Determination: Google Earth and Arcmap.

3.

Delivery System Diagram Attached (required). Indicate all major components and distances between components.

X 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					

*Code to correspond with No. on map and aerial photo

D. FLOW MEASUREMENTS

1.

Measurement Equipment	Type	Make	Model No.	Serial No.	Size	Calib. Date

2. Measurements: N/A

E. FLOW CALCULATIONS

Measured Method: N/A

____ Additional Computation Sheets Attached

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 tool

G. NARRATIVE/REMARKS/COMMENTS

This permit was originally examined on 5/18/2005 and a write up was written and returned to the state office. In 2018 the northern regional office received all state office vault files from our region for licensing or re-examine for enough information to license. This license was re-examined to determine the actual location of the POD.

Field exam with applicant, Jeff Weimer, showed a large reservoir in the forest. Mr. Weimer stated it originally use to be a beaver dam, but they made some modifications to the dam in order to apply for the permit. He stated they put in an overflow system and strengthened some of the beaver's dam. We were unable to make it to the actual location of the dam because of geographical location compared to the road. Mr. Weimer said it would be an all day journey because there were no trails to the location and there was no boat to take across the lake. The dam location was pinpointed on the map and GPS coordinates were found using Arcmap.

The surface area of the reservoir was traced out to be 7.8 acres with a maximum depth of 14 feet. Pond analysis tool was used to find the reservoir capacity of 43.7 acre-feet. There was no seepage as the USGS showed the geology as bedrock and the evaporation was equal to 8.7 acre-feet. Mr. Weimer pointed out the high water mark on stumps that showed it was down because of summer evaporation. There were three drainages that flowed into the reservoir. The USGS topo map shows a different picture then what is actually occurring. Water doesn't leave the reservoir at the same point the USGS shows and leaves at the POD instead. It is possible that the addition of the road and culvert then changed the way water flowed and instead of leaving the reservoir it flowed into the reservoir during high flow periods from the swampy area to the south. The USGS map shows Sanborn Creek being a perennial stream which at time of exam there was no visible water exiting that reservoir.

The source at time of application and permitting was listed as an unnamed stream which was tributary to Sanborn Creek. During license review it was found that the main source is Sanborn Creek which is tributary to Priest River. The source and tributary will be changed to identify them as Sanborn Creek and Priest River. We discussed whether we should add a MSF condition because Sanborn Creek flows into Priest River (97-7380). We felt a condition that could restrict the permit should not be added at time of licensing because it was not on the original permit.

Condition 18B was on permit but will be removed from license as the impoundment of water of this size is no longer regulated by the dam safety program. Conditions 219 and 220 will be added because they do not restrict the permit and just describe the impoundment of water. Condition 004 will be added as the reservoir is located on 4 separate taxlots.

Have conditions of permit approval been met? ☒ Yes ☐ No

H. RECOMMENDATIONS**1. Recommended Amounts**

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>DIVERSION RATE</u>	<u>ANNUAL VOLUME</u>
WILDLIFE STORAGE	01/01 to 12/31		52.4 AF
RECREATION STORAGE	01/01 to 12/31		52.4 AF
<u>Totals:</u>			52.40 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

Field Examiner's Name Adam F. Smith Date 9/6/2018
Reviewer Douglas Jones Date 1/28/2019

Total Storage Calculations

FILE NUMBER	97-7417
REVIEWER	Adam Frederick
DATE	9/6/2018

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

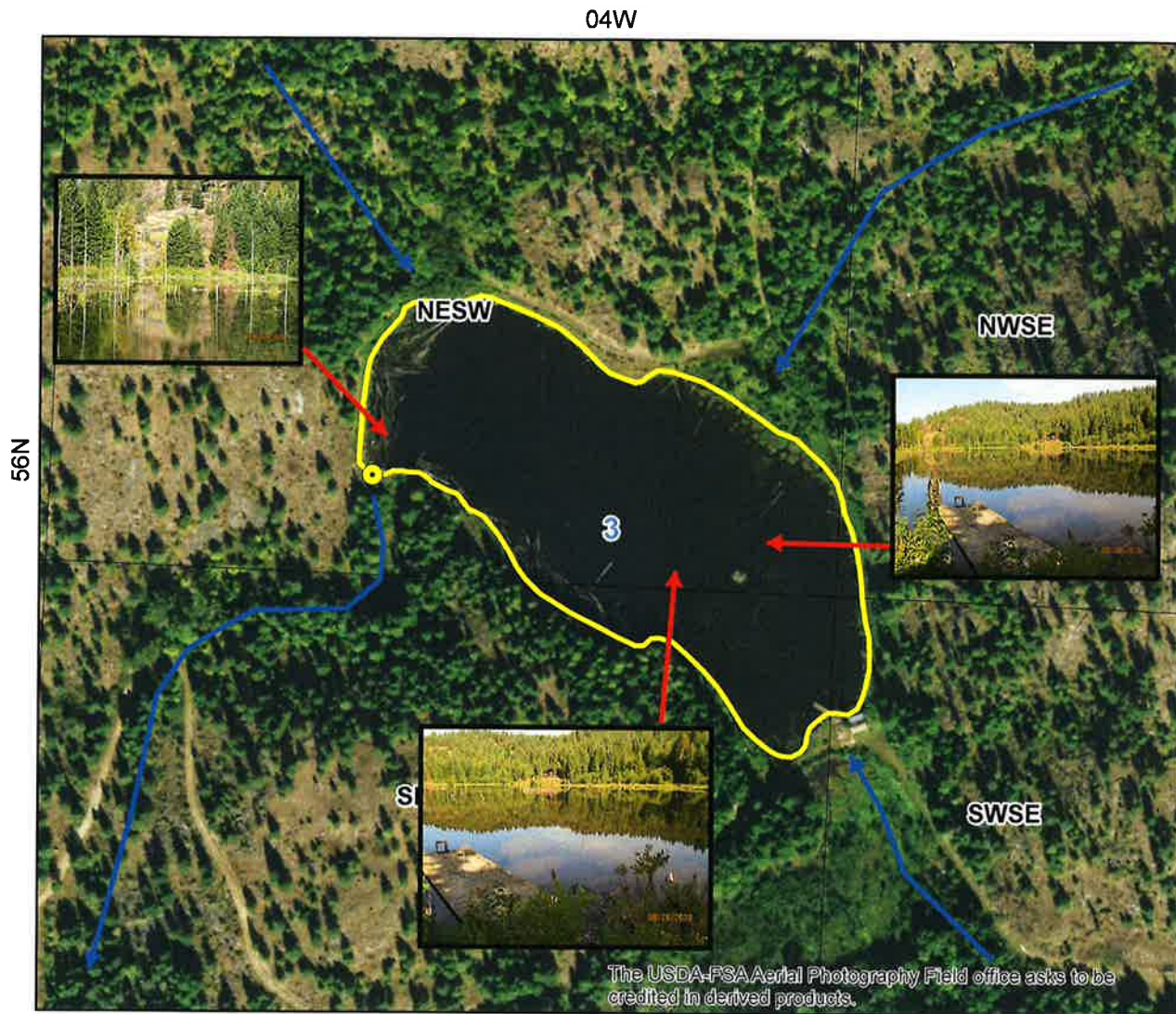
User Input
Calculated value
Formula Explanations

Surface Area (AC.)	7.8	"Surface Area" is automatically carried over from the "Seepage Loss" sheet.
Average Pond Depth (FT.)	5.6	"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)	43.7	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)	0.0	The "Estimated Seepage Loss" is automatically carried over from the "Seepage Loss" sheet.
Estimated Evaporation Loss (AF)	8.7	The "Estimated Evaporation Loss" is automatically carried over from the "Evaporation Loss" sheet.
Total Volume Required (AF)	52.4	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.

State of Idaho
Department of Water Resources
Attachment to Field Exam
97-7417

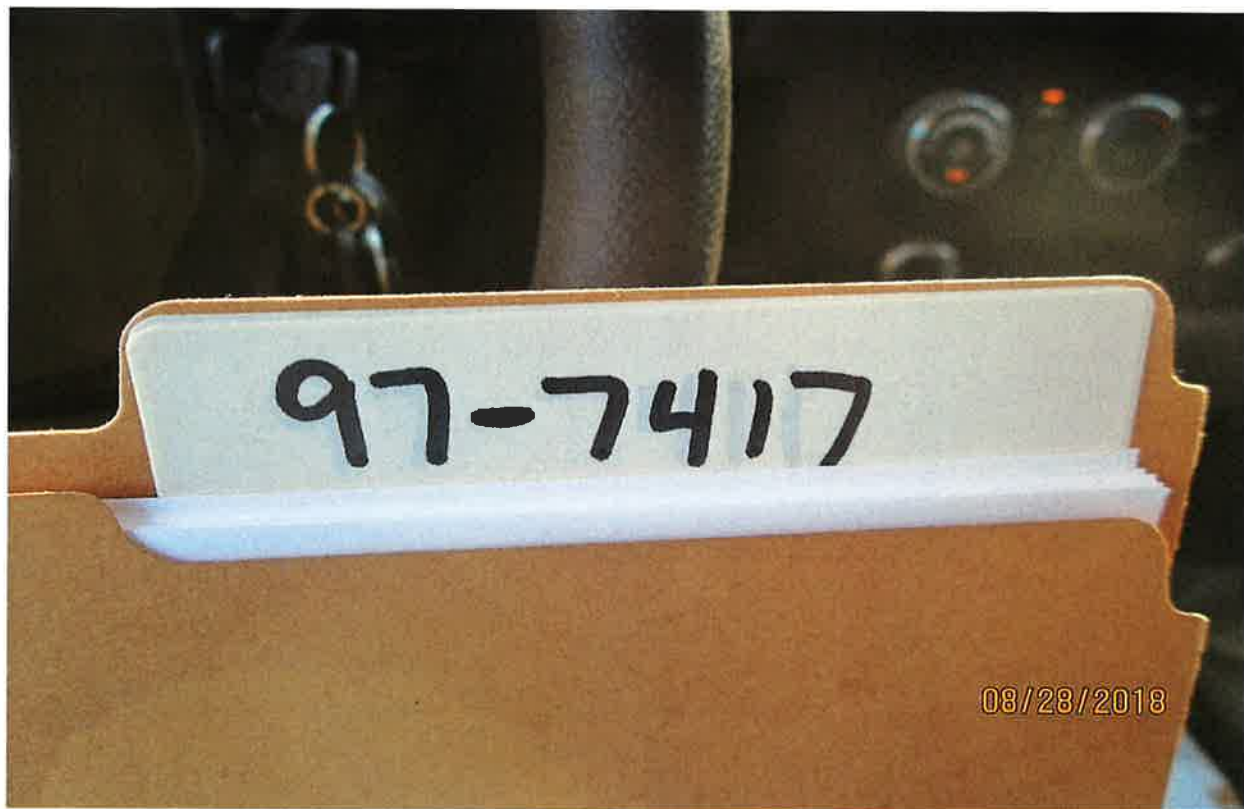
RECREATION STORAGE and WILDLIFE STORAGE / SYSTEM DIAGRAM



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

0 0.035 0.07 0.14 Miles

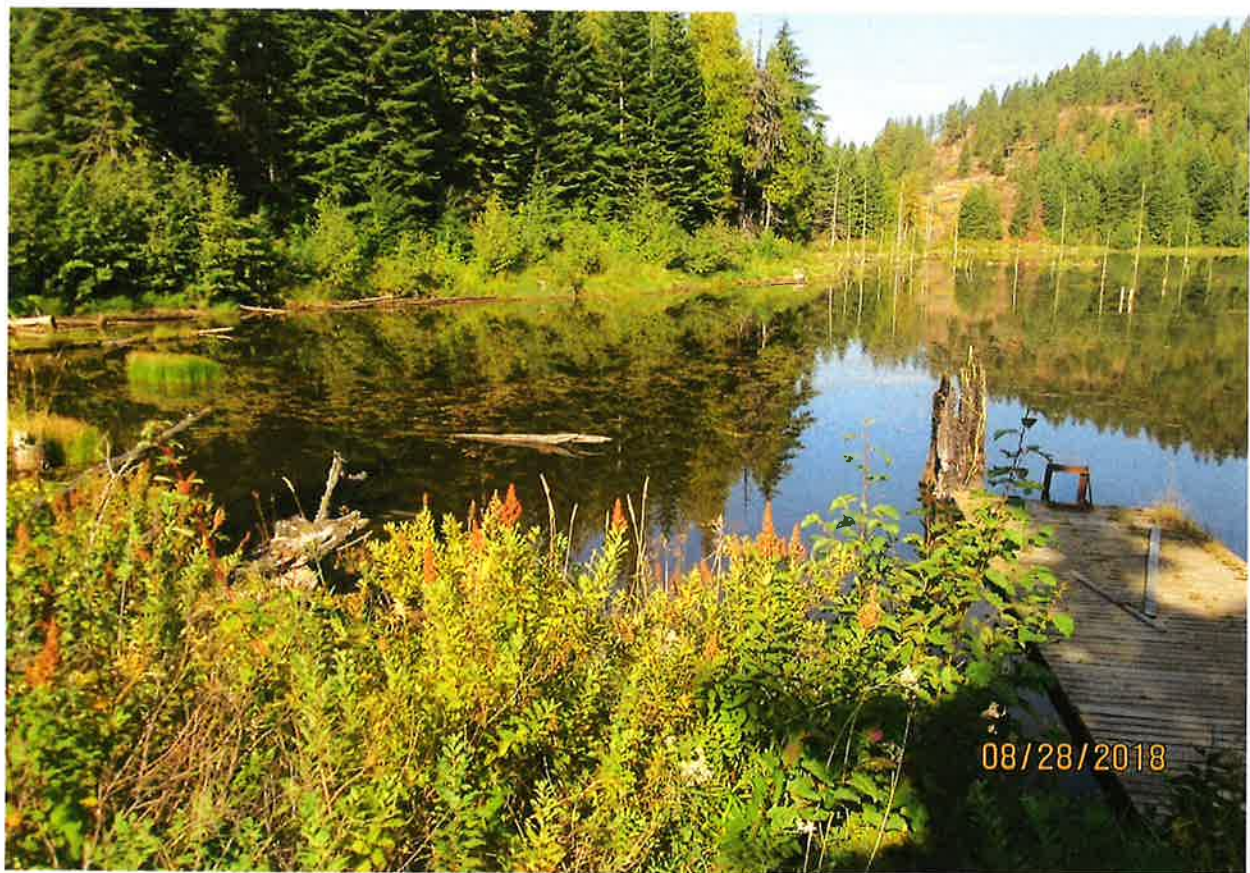




Storage POU.



Storage POU.





View of dam location. Dam location could not be reached without heavy equipment or boat.



Inflow from drainage.



Storage POU.

