

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 85-15743
Exam Date: 07/22/2015

1. Current Owner:
MC CANN LAND CO 1824 17TH AVE LEWISTON ID 83501

2. Accompanied by: Russel Snyder
Phone No: 208-791-9163
Address: 1409 Forrest Rd, Winchester ID 83555
Relationship to permit Holder: Permit holder's son

3. **SOURCE:**
SPRING

Tributary
MISSION 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
85-4182	SPRINGS	STOCKWATER	DECREED

Comments: Decreed WR 85-4182 uses a spring(s) source for stockwater use by the applicant with a POU shape that overlaps this Permit's POU. The source is a different spring than associated with this Permit, and the stockwater use is direct flow from stock tanks located at individual spring(s). There is no concern for overlap between 85-4182 & this Permit.

2. Other water rights with the same point-of-diversion: NO Overlap

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

SPRING L16 (SW¼ SE¼ NE¼), Sec. 23, Twp 33N, Rge 03W, B.M. LEWIS County

Method of Determination: GPS. POD is a pond earthen dam located at -116°39.760, 46°11.325.

PLACE OF USE: STOCKWATER STORAGE & 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	
33N	03W	23				X L16													

Method of Determination: Beneficial use field examination 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 1:24,000 or greater.

X

X Aerial Photo Attached (required for irrigation of 10+ acres).

X

X Photo of Diversion and System Attached

X

4.

Well or Diversion ID No.*	Motor Make	Hp	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size
POND DAM					

D. FLOW MEASUREMENTS

1.

Measurement Equipment	Type	Make	Model No.	Serial No.	Size	Calib. Date
NONE						

2. Measurements: NONE, pond dam built to capture spring water from the bank of the pond, no diversion rate applied to water right.

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.

- Stockwater Storage annual volume = 100 head cattle x 12 GPD x 325 DPY = 438,000 Gal per YR / 328,850 Gal per AF = **1.3 AF** considering department rounding standards.
- Fire Protection Storage annual volume = 0.5 AF (pond capacity) + 0.3 AF (seepage/evaporation loss) = **0.8 AF**

G. NARRATIVE/REMARKS/COMMENTS

Department staff completed an initial field examination on 7/23/2015 but did not capture sufficient data about the applicant's system required to accurately recommend for licensing. A follow-up sit visit was conducted on 6/9/2022 with the applicant's son, Russell Snyder, and 2ea ponds which were approved for development were observed to ground truth size, location, source, and tributary.

Western Pond - "Camp" pond

The pond, named "Camp" by the applicant, was found to be developed in a different 10-acre legally described location within L23. The pond located in Government Lot 23, NW¼SW¼ of Section 23, Township 33 North, Range 03 West was authorized for development in the "SE¼" ten-acre tract but was found to be developed in the "NW¼" ten-acre tract. Additionally, the pond was developed using an Unnamed Stream source tributary to Mission Creek vice the Spring source permit approved to develop. The unnamed stream which the pond was constructed on is tributary to multiple creeks & rivers with Minimum Stream Flow (MSF) Water Rights as follows:

- Mission Creek – MSF 85-15605
- Lapwai Creek – MSF 85-15603
- Clearwater River – MSF 86-7345

Based on the information above, the western pond associated with Permit 85-15743, Camp Pond, is not being recommended for licensing and the POD & POU shall be removed from the Permit during licensing review. Concern from IDWR related to an absence of public comment period required at time of advertising the application did not take place with

regard to the unnamed stream which was developed by the applicant; the development of water from sources with MSF rights or tributary to MSF rights are of greater concern to the public and IDWR is not comfortable recommending a license for water use which wasn't afforded a public comment period.

A letter was drafted and mailed on 6/23/2022 to the applicant and son, Russel Snyder, explaining my recommendation to remove the pond from the permit during licensing review and is on file. At time of site visit in 2022, the unnamed stream had breached the overflow device on the pond and was flowing unobstructed downstream. Some ponding of water remains, but primarily due to seasonal runoff. The pond's current condition doesn't warrant additional action to deconstruct the impoundment bank, but if the applicant would like to use the pond in the future a new application for permit shall be required.

Eastern Pond - "Corral" pond

During the site visit the horseshoe shaped pond was observed to be impounding spring water near the uphill grade bank (SW bank) of the pond. Impounded spring water is used by the applicant for Stockwater storage & Fire Protection storage purposes. There is no diversion associated with this pond. The pond dam was GPS located at a location where a natural flow path would route. The pond was excavated entirely in Government Lot 16 vice the permit approved location for the POD of Government Lot 15. The ten-acre legal description also changed from NW¼ designation to the SW¼ designation identified during licensing review. An application for amendment was drafted and mailed to the applicant on June 23, 2022 & received back from the applicant on June 29, 2022. The legal description for the POD was revised to reflect L16 (SW¼ SE¼ NE¼), Sec. 23, Twp 33N, Rge 03W.

During the site visit an unnamed stream was observed flowing just north of the pond dam, curling around the dam where it continued down stream tributary to Mission Creek. In the NW corner of the pond a natural overflow channel allows excess Spring water to flow into the unnamed stream. Russel Snyder asserts the pond remains full until late summer when it starts to lose some volume, but never goes dry. Due to water flowing from the pond into the unnamed stream, the tributary associated with Spring source was clarified to reflect Mission Creek vice Sinks during licensing review. Although Mission Creek does have a MSF Right 85-15605, I am not recommending MSF conditions be added during licensing review as they were not present on the permit.

The pond POU was traced out on field maps, and during licensing review Arcmap aerial imagery was used to accurately designate the pond's surface area which equals 0.13 acres. The pond has a maximum depth of 10 feet, average depth of 4 ft, pond capacity of 0.5 af, seepage & evaporation loss rate of 0.3 af, and total volume required equal to 0.8 af annually. The pond is used by the applicant for stockwater purposes, with range cattle drinking directly from the pond throughout the season. The stockwater storage component annual volume equals 1.3 af for 100 head of cattle. The fire protection component annual volume equals 0.5 af pond capacity + 0.3 af seepage/evaporation = **0.8 af** annually. The maximum diversion volume recommended for licensing equals 0.8 af + 1.3 af = **2.1 af**.

Conditions 26A, X02, & 082 were removed from the permit during licensing review. Conditions 219 & 220 were revised to reflect a single pond's size and volume metrics derived from the IDWR pond analysis worksheet. All other conditions on the Permit shall be carried forward to licensing. Overlap Concerns: Decreed WR 85-4182 uses a spring(s) source for stockwater use by the applicant with a POU shape that overlaps this Permit's POU. The source is a different spring than associated with this Permit, and the stockwater use is direct flow from stock tanks located at individual spring(s). There is no concern for overlap between 85-4182 & this Permit. There are no additional 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>
STOCKWATER STORAGE	01/01 to 12/31	1.3 AF
FIRE PROTECTION STORAGE	01/01 to 12/31	0.8 AF

Totals: 2.1 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 -

Field Examiner's Name

[Signature]

Date

6/30/2022

Reviewer

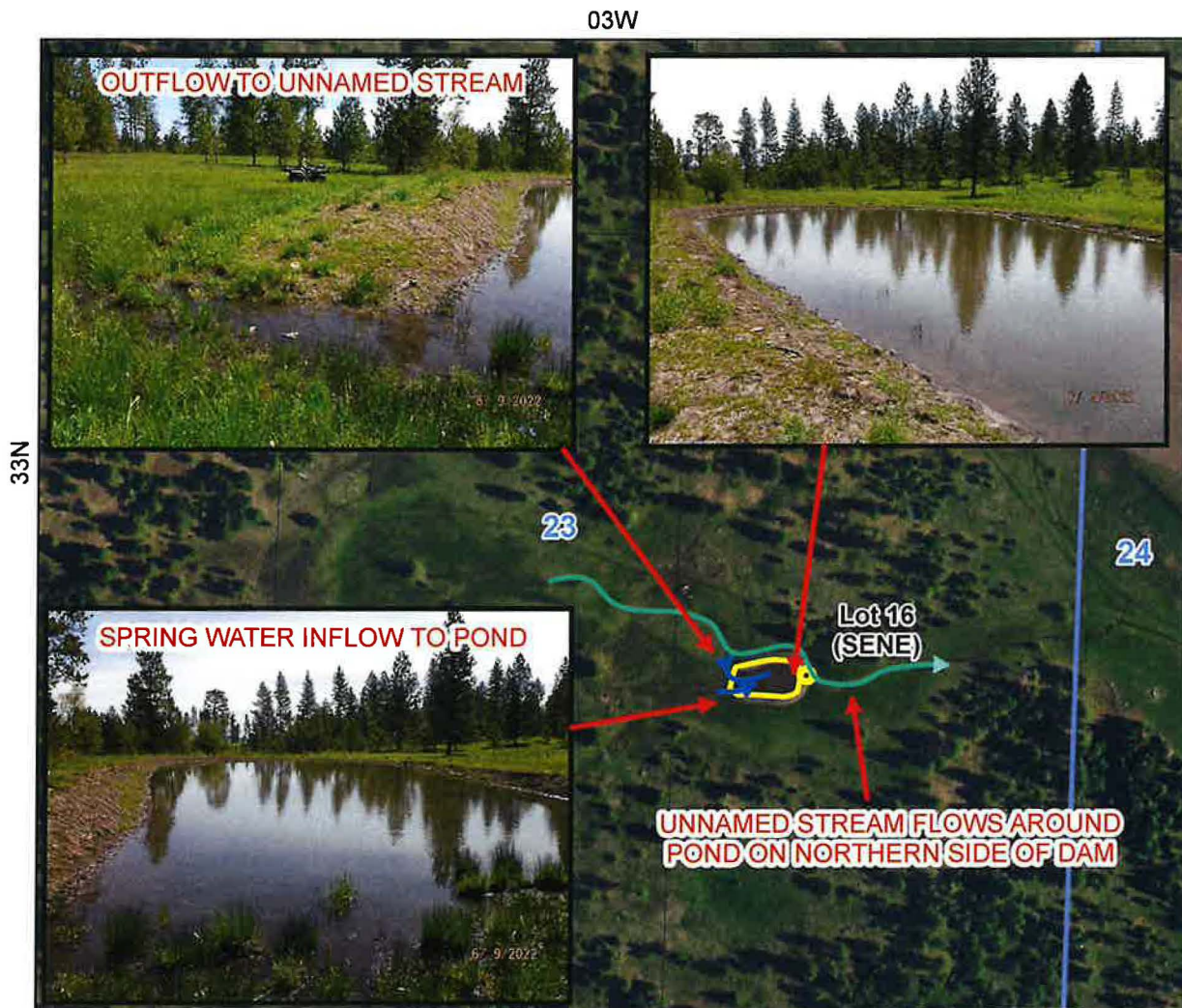
[Signature]

Date

7/21/2022

State of Idaho
Department of Water Resources
Attachment to Field Exam
85-15743

STOCKWATER STORAGE & FIRE PROTECTION STORAGE system diagram.



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

0 0.035 0.07 0.14 Miles



Total Storage Calculations

FILE NUMBER	85-15743
REVIEWER	LUKE BATES
DATE	6/21/2022

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

POND LOCATED IN Sec. 23, SENE16

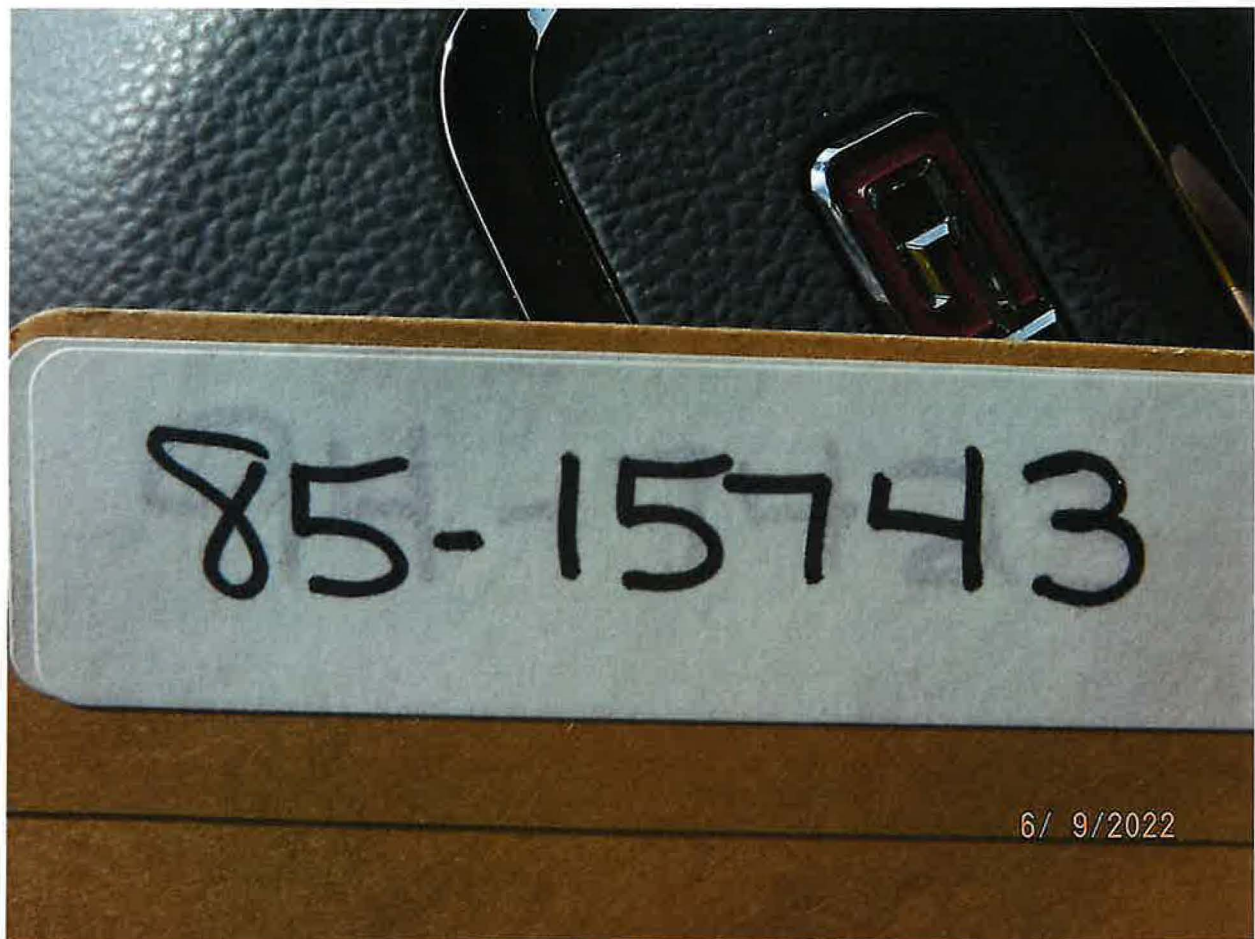
Surface Area (AC.)	0.13	"Surface Area" is automatically carried over from the "Seepage Loss" sheet.
Average Pond Depth (FT.)	4	"Average Pond Depth" depicts the actual depth of the pond either measured or estimated. Note: If you know the maximum depth and not the average depth, the Field Examiner's Handbook 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)	0.5	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)	0.2	The "Estimated Seepage Loss" is automatically carried over from the "Seepage Loss" sheet. <i>LBates</i>
Estimated Evaporation Loss (AF)	0.1	The "Estimated Evaporation Loss" is automatically carried over from the "Evaporation Loss" sheet.
Total Volume Required (AF)	0.8	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.

$$\square \text{ Fire Protection Storage} = 0.5 \text{ af pond capacity} + 0.3 \text{ af seepage/evaporation} = 0.8 \text{ af (Rounded up Dept Standards)}$$

$$\square \text{ Stockwater Storage} = 100 \text{ head cattle} \times 12 \text{ gpd} \times 365 \text{ day} = 438,000 \text{ gal per year}$$

and

$$438,000 \text{ gal} / 325,850 \text{ gal/af} = 1.3 \text{ af annually}$$



INITIAL BENEFICIAL USE FIELD EXAM DATE 7/23/2015; FOLLOW-UP FIELD EXAM DATE 6/9/2022



POD – EARTHEN POND DAM



POU – FIRE PROTECTION STORAGE & STOCKWATER STORAGE POND





OVERFLOW DISCHARGE FROM ROCKED CHANNEL RETURNS BACK TO AN INTERMITTENT STREAM



POU – STORAGE POND