

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 37-22544

Exam Date: 10/30/2015

1. Current Owner: LAVA LAKE LAND & LIVESTOCK LLC
PO BOX 2249
HAILEY ID 83333
(208) 788-1710
2. Accompanied by: Permission to visit pond site for Field Exam granted by Mike Gordon.
Phone No: (208) 309-3049
Address: PO Box 2249, Hailey ID 83333
Relationship to Permit Holder: Marketing Manager for Lava Lake Land & Livestock LLC

3. SOURCE

UNNAMED STREAM

TRIBUTARY

COPPER CREEK

B. OVERLAP REVIEW

1. Other water rights with the same place of use: N/A
2. Other water rights with the same point of diversion: N/A

C. DIVERSION AND DELIVERY SYSTEM**1. LOCATION OF POINT(S) OF DIVERSION:**

UNNAMED STREAM

NE1/4SE1/4

Sec. 21, Twp 01N, Rge 23E, B.M.

BLAINE County

Method of Determination: On-site examination and GPS waypoint recorded using Garmin GPSmap 60CSx

2.

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	
01N	23E	21													X				

Method of Determination: On-site examination and GPS tracks recorded using Garmin GPSmap 60CSx

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 DiversionID No.*Motor MakeHpMotor Serial No.Pump MakePump Serial No. or DischargeSize

Embankment below pond with overflow and level control device

**attached printout*
Dikes - both spillway and adjustable level control are present

D. FLOW MEASUREMENTS: N/A - Wildlife Storage

1.

MeasurementEquipmentTypeMakeModel No.Serial No.SizeCalib. Date

N/A

2. Measurements: N/A

E. FLOW CALCULATIONS: N/A - Wildlife Storage

____ Additional Computation Sheets Attached

Measured Method: N/A

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation: N/A - Wildlife Storage

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) =$$

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

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} =$$

2. Volume Calculations for Other Uses: Wildlife Storage - Flat Bottom Pond:

$$1.3 \text{ acre surface area} \times 6.0' \text{ maximum depth} = \underline{7.8 \text{ acre feet}}$$

G. NARRATIVE/REMARKS/COMMENTS

Application for permit was submitted by Lava Lake & Livestock LLC on 06/23/2010 and proof of beneficial use was submitted 09/21/2015.

This was the second field exam for two wildlife storage permits that I was performing field exams on that day, both owned by Lava Lake & Livestock LLC. I had to walk a short distance up the dry stream channel downstream of the pond. When I arrived at the permitted pond, I found a larger and deeper pond than the one I had previously visited for permit 37-22543, but it had a very similar construction with a same type of inline water level control structure on the outlet where the 8' embankment crossed the stream channel. The pond is, for the most part, a flat bottom reservoir with an average depth of 6'. With a surface area of 1.3 acres and 6' depth, this pond has a storage capacity equal to the permitted amount of 7.8 af. Upstream of the pond there was water flowing in the channel from springs approximately 240' above the pond. The stream channel extended upstream 590' from the pond, but the upper spring wasn't flowing on the day of the exam. The area adjacent to the pond on the east side was a marsh with numerous springs and seeps populated with cattails and bulrush. This pond was constructed as permitted using water from a spring source, but the embankment was built across a flowing seep/stream channel. I have changed the source from springs to unnamed stream to clarify the source.

There is an embankment that runs from the northwest end of the pond approximately 400' to the south and then runs east another 260' to the east end of the pond. The embankment extends approximately 160' north of the pond and the entire 400' north-south portion of the structure act as a pivot stop on the west side. The embankment reaches a peak height of 8' where it crosses the stream channel. At the outlet where the embankment crosses the stream channel, there is an inline water level control structure (see figures #3 and #4). I could not hear or see water flowing through the structure and as stated before, the stream channel below the embankment was dry. Since there was a small amount of water flowing into the pond and the level of the pond was just slightly below the level of the spillway, there was likely seepage loss back into the marsh and/or evaporation keeping water from spilling out through the level control structure. The pond is designed to maintain the water level at the 6' depth and the permitted capacity on a year round basis. As was noted on the other pond as well, ducks and geese were on the pond when I arrived but abruptly flew away upon my arrival.

No mitigation for evaporative losses was required for this permit as the water surface area is an area which consisted of actively growing vegetation utilizing the surface spring water and/ or adjacent sub-water.

All conditions on the permit appear to have been met. One condition required 3.6 acres of irrigation to be dried up to mitigate for the initial fill of the pond when it was constructed. Approximately 39.5 acres were idled and dried up under the specified water rights in 2011 when the pond was constructed and the acres are clearly visibly not irrigated in the 2011 aerial imagery in ArcMap (NWSW & SWNW of Sec. 22). I have placed condition R02 on the license, as it is applicable for on-stream storage in water district boundaries. Since the level control structure has a lock hasp on it, the diversion works are currently compliant with condition R02. I have also dropped the 10 acre tract description down to the 40 acre description of NESE since the source is an unnamed stream and a 10 acre tract description isn't required for stream sources.

Recommend licensing 7.8 AF for Wildlife Storage.

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		7.80 AF
<u>Totals:</u>			7.80 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 ☐ Other

I. AUTHENTICATION

Field Examiner's Name Bill Mills Date 11-18-2015

Reviewer [Signature] Date 1-29-16



Figure 1: Looking northeast across the pond



Figure 2: Looking south down embankment on west side



Figure 3: Water level control structure above outlet



Figure 4: View inside level control apparatus-water rises up to orifice at preset height, excess flows through, cascades into outlet pipe and out to stream channel



Figure 5: Water flowing in unnamed stream channel towards the pond



Figure 6: Looking north along west edge of pond



Figure 7: Looking east along south end of pond

Wildlife Storage 37-22544



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- Constructed of rugged 1/2" PVC with lockable plastic lid.
- Stainless steel screws and custom anodized aluminum corner extrusions used for strength and durability.
- Flexible couplers allows PVC, plastic pipe, or other materials to be easily attached. (Please specify type of pipe when ordering.)
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- There is a 5-year warranty on all standard structures.
- Customized or special orders will carry a 1-year warranty on workmanship and material and are nonreturnable.
- [Inline Water Level Control Structure™ Spec Sheet](#)

*One tube of grease is included with each structure.

US Patent No. 6,715,508 B2

US Patent No. 6,786,234 B2

Canadian Patent No. 2,403,456

Canadian Patent No. 2,466,976

PRICING REVIEWS



Inline Water Level Control Structure™

Table Reflects List Pricing

Larger CMP structures also available. Call for details on custom size and pricing.

Pipe Size	Width (Inside Dim.)	Depth (Inside Dim.)	2' (Height)	3' (Height)	4' (Height)	5' (Height)	6' (Height)	8' (Height)	10' (Height)	12' (Height)
4"	8"	10"	\$428.05	\$482.65	\$537.25	\$590.76	\$646.45	\$791.69	\$906.35	\$1060.66
6"	8"	10"	\$436.79	\$491.39	\$544.90	\$600.59	\$654.10	\$800.86	\$995.44	\$1069.70
8"	11 5/8"	12"	\$464.09	\$537.25	\$609.32	\$716.02	\$755.65	\$946.48	\$1223.12	\$1294.25

Field Exam 37-22544