

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 43-7327

Exam Date: 6/10/2011

1. Current Owner: US DEPT OF INTERIOR
BUREAU OF LAND MANAGEMENT
15 E 200 S
BURLEY ID 83318
(208)677-6626

2. **SOURCE**

SPRING

TRIBUTARY

RICE CREEK

B. OVERLAP REVIEW

1. Other water rights with the same place of use: 43-11297 (Stockwater; 0.04 cfs; Bureau of Land Management)
2. Other water rights with the same point of diversion: 43-11297

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

SPRING SW1/4SW1/4SW1/4 Sec. 17, Twp 13S, Rge 26E, B.M.
CASSIA County

Method of Determination: Waypoints were collected with a Garmin GPS map 76S receiver and downloaded into an ArcMap shapefile that corresponds with 2009 aerial photography and verified the points of diversion to be in Twp 13S Rge 26E S 17 SWSWSW¼. See attached map.

2.

PLACE OF USE: STOCKWATER

Twp	Rge	Sec	NE				NW				SW				SE				
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	Totals
13S	26E	19	X																

WILDLIFE same as STOCKWATER

Method of Determination: Waypoints were collected with a Garmin GPS map 76S receiver and downloaded into an ArcMap shapefile that corresponds with 2009 aerial photography and verified the points of diversion to be in Twp 13S Rge 26E S 19 NENE¼. See attached map.

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**

N/A

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

D. FLOW MEASUREMENTS: No flow measurement possible**E. FLOW CALCULATIONS**

_____Additional Computation Sheets Attached

Measured Method:

Measured Method: Hazen Williams Full Pipe Flow Calculation:

$$Q=0.432C_1D^{2.63}S^{0.54}$$

Where:

C₁ = roughness coefficient

D = Diameter in feet

S = Slope

S= 21' elevation drop / 2085' distance = 0.01

C₁ = 140 (coefficient for polyethylene)

D = 0.167' (2.0" polyethylene pipe)

Q= 0.047 cfs

F. VOLUME CALCULATIONS

1. Volume Calculations for Other Uses: Stockwater/Wildlife:

Stockwater:

875 Range Cattle at 12 gpd/head:

12 gpd/head x 875 head x 365 days / 325850 gallons/AF = 11.76 AFA

Stockwater Right 43-11297:0.04 cfs x (723.94 afa/1cfs) = 28.96 AFA**Wildlife:**

800 mule deer (wildlife) at 12 gpd/mule deer:

12 gpd/head x 30 head x 365 days / 325850 gallons/AF = 0.4 AFA**G. NARRATIVE/REMARKS/COMMENTS**

Permit 43-7327 is for 0.02 cfs stockwater and 0.01 cfs wildlife.

Application for permit 43-7327 submitted by US Dept of Interior/ Bureau of Land Management was filed on January 12, 2000, and proof of Beneficial Use was submitted April 6, 2001.

Existing system consists of a small wood headbox (2' L x 1' W x 6" D) that supplies water through a 2" polyethylene pipe over an approximate distance of 2085' to two troughs placed end to end. Each trough measures 10' L x 5.17' W x 1.3' D. The water level in the

troughs are regulated by a single float valve on the west end of the trough closest to the spring. The west trough was filled to capacity, while the east trough was almost empty as the connector pipe appeared to be clogged with algae and sediment. Headbox contained water but no measurable flow was present, therefore the Hazen Williams Full Pipe Flow Calculation was utilized to obtain a potential rate of diversion.

No cattle or wildlife were present at the trough on the day of the exam. However, ample deer scat was present in the spring area. According to Jeremy Bisson, BLM Wildlife Biologist, the area is known to be winter range for up to 800 head of mule deer. As that is mostly winter range use, I estimate use based on 30 head potentially utilizing the trough on a daily basis. Steve Davis, BLM Hydrologist, stated the site is utilized by 324 range cattle.

An overlap review indicates that stockwater right 43-11297 already exists for this system. This right was originally claimed in the SRBA by Charles R. and Janet O. Ward as 43-274 for irrigation, stockwater, and domestic. Based on recommendation this right was split into three rights: 43-2558 (irrigation); 43-11293 (domestic and stockwater); and 43-11297 (stockwater). A pipeline system had been developed on BLM ground for right 43-11297 and as such, the recommendation was objected to by the BLM. A stipulation agreement was reached and ownership of this right was transferred to the BLM. The right was decreed 10/08/2002. On January 12, 2000 the BLM filed this permit application for the same system. I asked Steve Davis, if the BLM would consider rescinding either this permit or the water right. He contacted Fred Price, BLM Water Rights Specialist, who suggested they retain right 43-11297, and that the Department license the permit for wildlife use only.

Right 43-11297 can provide up to 28.96 afa based on flow rate and season of use, and there's been no additional beneficial use developed.

Recommend no additional permitting of beneficial use for stockwater.

Recommend permitting a rate of diversion of 0.01 cfs and an annual volume of 0.4 afa for wildlife.

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	1/01 to 12/31	0.010 CFS	0.4 AFA
<u>Totals:</u>		0.010 CFS	

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 Brian Mott Date 7-29-2011
 Reviewer Steve Davis Date 8/5/11

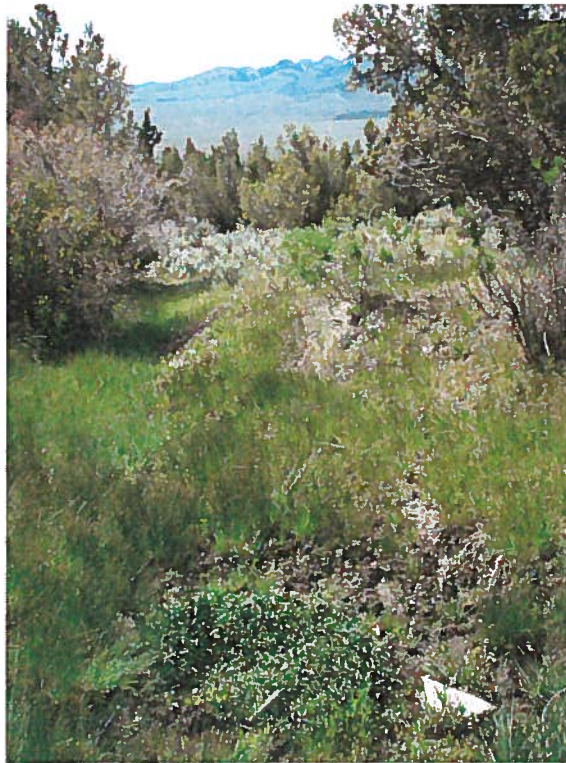


Figure 1: Point of Diversion looking south along pipeline.



Figure 2: Headbox after removal of vegetation.



Figure 3: View of troughs looking south towards the Jim Sage Mountains.



Figure 4: View of troughs looking west.

Permit #43-7327



