

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 37-8930

Exam Date: 2/13/2012

1. Current Owner: US DEPT OF INTERIOR
BUREAU OF LAND MANAGEMENT
400 WEST F ST
SHOSHONE ID 83352
(208)732-7200
2. Accompanied by: Field exam completed in office utilizing Department resources.

3. SOURCE

UNNAMED STREAM

TRIBUTARY

FOURMILE CREEK

B. OVERLAP REVIEW

1. Other water rights with the same place of use: 37-18300 (in-stream stockwater; 0.02 cfs; BLM)
2. Other water rights with the same point of diversion: None

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

UNNAMED STREAM

L4 SE1/4SW1/4SW1/4

Sec. 35, Twp 03S, Rge 14E, B.M.

GOODING County

Method of Determination: Point of diversion determined by using 2009 aerial photography, 2010 Bing Maps satellite imagery and 2011 Google Earth satellite imagery. Point of diversion appears to be in Twp 03S, Rge 14E, S 35, L4 SESWSW¼. See attached map.

2.

PLACE OF USE: STOCKWATER STORAGE

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			<u>NE</u>	<u>NW</u>	<u>SW</u>	<u>SE</u>	<u>NE</u>	<u>NW</u>	<u>SW</u>	<u>SE</u>	<u>NE</u>	<u>NW</u>	<u>SW</u>	<u>SE</u>	<u>NE</u>	<u>NW</u>	<u>SW</u>	<u>SE</u>	
03S	14E	35											X						
													L 4						

PLACE OF USE: WILDLIFE STORAGE

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			<u>NE</u>	<u>NW</u>	<u>SW</u>	<u>SE</u>	<u>NE</u>	<u>NW</u>	<u>SW</u>	<u>SE</u>	<u>NE</u>	<u>NW</u>	<u>SW</u>	<u>SE</u>	<u>NE</u>	<u>NW</u>	<u>SW</u>	<u>SE</u>	
03S	14E	35											X						
													L 4						

Method of Determination: Place of use determined by using 2009 aerial photography, 2010 Bing Maps satellite imagery and 2009 Google Earth satellite imagery. Point of diversion appears to be in Twp 03S, Rge 14E, S 35, L4 SWSW¼. See attached map.

3. ☒ 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

D. FLOW MEASUREMENTS N/A

E. FLOW CALCULATIONS N/A

F. VOLUME CALCULATIONS

1. Volume Calculations for Other Uses: Stockwater Storage and Wildlife Storage:

Surface area of reservoir = 0.2 acres

Determined using 2009 aerial photography and 2010 satellite imagery in ArcMap.

Reservoir Capacity = **0.6 AF**

Determined using flat bottom reservoir equation from IDWR Field Examiners Handbook and information provided in permit application.
(Capacity = Surface area x Maximum Depth)
0.2 acres x 3.0 feet = 0.6 AF

Potential Stock and Wildlife Use:

((1445 range cattle x 12 gpd) + (1000 sheep x 2gpd)) x 182 days/ 325850 = 5.2 AF (Based on a potential 6 month grazing season)

30 wild ungulates x 12 gpd x 365 days/ 325850 = 0.40 AF

Total: 5.2 AF + 0.40 AF = **5.6 AF**

G. NARRATIVE/REMARKS/COMMENTS

Permit 37-8920 is for stockwater and wildlife storage. Source is an unnamed stream tributary to Fourmile Creek. The storage reservoir is referred to as Upper Bench Reservoir.

Application for permit 37-8920 submitted by the US Dept of Interior, Bureau of Land Management was received on September 01, 2000 and proof of Beneficial Use was submitted the same day.

Upper Bench Reservoir is located approximately 13.0 miles north and 2.8 miles west of the intersection of Hwy 26 and Hwy 46 in Gooding. Point of diversion and place of use are located in the SESWSW¼ of Sec. 35, Twp 03S, Rge 14E. The reservoir is a small pit reservoir with a manmade embankment that has a storage capacity of 0.6 acre feet. The reservoir captures mostly snowmelt and spring runoff in an ephemeral drainage that is tributary to Fourmile Creek.

According to the application for permit, up to 1445 range cattle, 1000 sheep and varying numbers of wildlife use the water source. Precipitation deficit data from the University of Idaho ET website indicates a mean of 695 mm (2.28 AF) per acre for small stockwater ponds in the Magic Dam area. Based on the calculated surface area of 0.2 acres, this indicates that approximately 0.46 AF could potentially evaporate from the reservoir each year. Potential stock and wildlife use was calculated at 5.6 AF, exceeding the 0.6 AF capacity of the reservoir. Calculations were based on stock numbers listed on the permit and a number of wild ungulates thought to represent the size of an average deer herd.

Overlap analysis indicates place of use overlap with right 37-18300, an in-stream stockwater right owned by the BLM.

As the reservoir has a storage capacity of 0.6 AF and a potential for evaporative loss of 0.5 AF, evaporative losses will be included in the recommended volume for a total of 1.1 AF.

Recommend permitting an annual volume of 1.1 AF.

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	1.10 AF
WILDLIFE STORAGE	01/01 to 12/31	1.10 AF
<u>Totals:</u>		1.10 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 2-13-2012

Reviewer Chris Menzies Date 2/14/2012

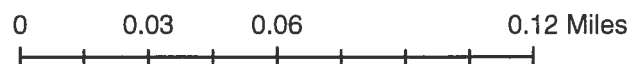
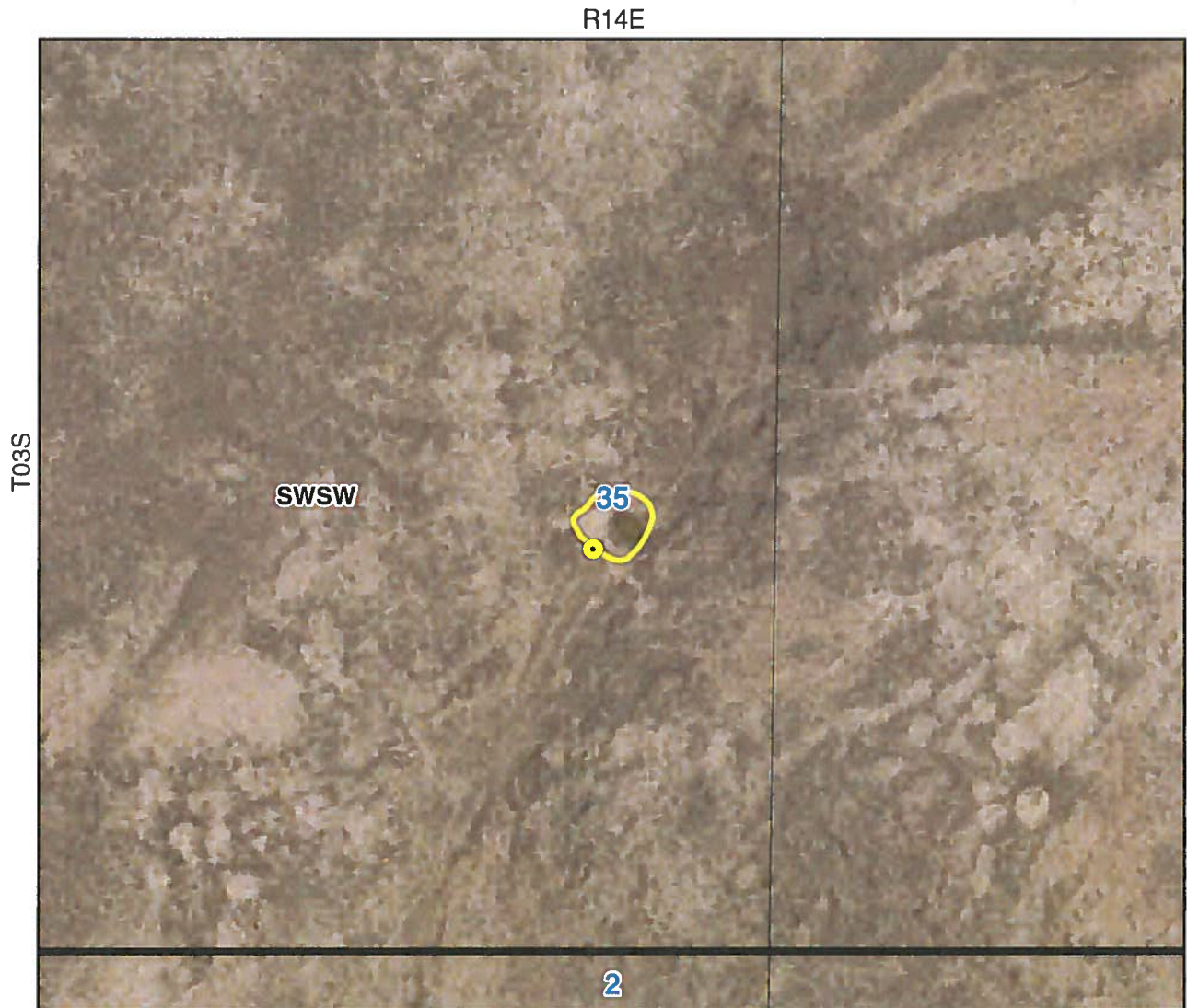


Figure 1: Aerial Photo of Upper Bench Reservoir taken from the north looking south.

State of Idaho
Department of Water Resources
Water Right License

37-8930

Water Service Area Boundary for Us Dept Of Interior



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

