

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 72-16909
Exam Date: 8/8/2017
(In Office)

1. Current Owner:
JUSTIN and PATRICIA FARR
PO BOX 1255
CHALLIS ID 83226
(208) 879-2121

2. Accompanied by: Corey Skinner (IDWR) during the 9/26/2014 exam for permit 72-7569

3. **SOURCE:**
UNNAMED STREAM

TRIBUTARY:
CHALLIS CREEK

B. OVERLAP REVIEW

1. Other water rights with the same place of use: Water right 72-7569.
2. Other water rights with the same point-of-diversion: Water right 72-7569

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

UNNAMED STREAM NE¼NE¼ Sec. 22, Twp 14N, Rge 19E, B.M. CUSTER County

Method of Determination: Field Visit (9/26/2014) and Aerial Photography

2.

PLACE OF USE: AESTHETIC 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	
14N	19E	22	X																

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	
14N	19E	22	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	
14N	19E	22	X																

Method of Determination: Field Visit (9/26/2014) and Aerial Photography

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).

D. FLOW MEASUREMENTS

Not required for on stream storage

E. FLOW CALCULATIONS

Not required for on stream storage

F. VOLUME CALCULATIONS

The reservoir has a surface area of 3.75 acres (per ARCMAP and aerial photography) and an average depth of 3.0 feet for a total capacity of 11.25 acre-feet (11.3 acre-feet rounded). University of Idaho data indicates that approximately 1.87 acre-feet of water per year will evaporate off of an acre of an open water-shallow system in the Challis area after accounting for precipitation. Using this 1.87 acre-feet per acre times the 3.75 acres of surface area indicates that annual evaporation loss from the reservoir would be about 7.0 acre-feet. Reservoir was constructed in a marshy area and numerous springs actually rise within the reservoir footprint. Therefore, there should be no seepage loss associated with this facility. Total volume of 18.3 acre feet equals storage volume (11.3 acre-feet) plus annual evaporative loss (7.0 acre-feet). License 72-7569 allows for 0.5 acre-feet of storage, permit 72-16909 allows for 17.8 acre-feet of storage so recommend 17.8 acre-feet for licensing

G. NARRATIVE/REMARKS/COMMENTS

This licensing exam is based on observations made on September 26, 2014, Corey Skinner and I conducted the licensing exam for permit 72-7569. During the exam, it was noted that the reservoir that was constructed was significantly larger than the 0.5 acre-feet allowed by permit 72-7569. We attempted to make contact with the applicant and knocked on the door on the nearby residence, but no one was home. The home and the reservoir are located on property owned by Justin and Patricia Farr. On October 8, 2015, Corey was able to meet with Justin and Patricia Farr to discuss options relating to water rights and the development of the reservoir. As a result of this meeting, the Farris decided to pursue the licensing of permit 72-7569. They also decided to make a new water right filing in an attempt to cover the balance of the reservoir not covered by permit 72-7569. Application for Permit 72-16909 was filed on December 4, 2015 for 17.8 acre-feet of on stream wildlife, recreation, and aesthetic storage on an unnamed stream tributary to Challis Creek for the balance of the storage volume not covered by water right 72-7569. The proposed point of diversion and place of use is in a marshy area located approximately 2.0 miles north and 1.35 miles east of the Highway 93 & Main Street/Garden Creek Road intersection in Challis. The Application for Permit was processed without protest and on September 6, 2016 Permit to Appropriate Water 72-16909 was issued. Proof of Beneficial Use was due on or before September 1, 2017. Proof of Beneficial Use was filed on November 7, 2016 by Justin and Patricia Farr.

The reservoir developed under 72-7569, and to be covered by 72-16909, was created by the development of a diversion structure at a culvert under a road along the north boundary line of Section 22. The diversion structure consists of a metal structure at the culvert entrance that allows for the installation of flashboards to back up water upstream of the culvert to form a reservoir. The reservoir has a surface area of 3.75 acres (per ARCMAP and aerial photography) and an average depth of 3.0 feet for a total capacity of 11.25 acre-feet (11.3 acre-feet rounded). The reservoir was constructed in a marshy area and numerous springs actually rise within the reservoir footprint. Therefore, there should be no seepage loss associated with this facility. The annual evaporative loss associated with the reservoir was estimated at 7.0 acre-feet bringing the total volume needed to cover the reservoir to 18.3 acre feet (11.3 acre-feet + 7.0 acre-feet). Permit 72-7569 was licensed for 0.5 acre feet, and permit 72-16909 can be licensed for 17.8 acre-feet to cover the facility for a combined total of 18.3 acre feet for the reservoir.

The reservoir is constructed on a stream that is located within Water District 72A. However, it is in a portion of Water District 72A that is not currently administered by the district and may not be for some time. Because this portion of the district is inactive, it seems appropriate to require "upon specific notification" type of conditions with regards to any measuring device and lockable works conditions.

Recommend Licensing Permit 72-16909 for 17.8 AF for various storage uses.

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		17.8 AF
RECREATION STORAGE	01/01 to 12/31		17.8 AF
AESTHETIC STORAGE	01/01 to 12/31		17.8 AF
<u>Totals:</u>			17.80 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 ☒ None

I. AUTHENTICATION

Field Examiner's Name Benny Walk Date 8/9/2017
Reviewer _____ Date _____

72-16909
Point of Diversion & Place of Use Map
2015 imagery



72-16909
Licensing Exam Photos
9/26/2014

Permit Holder's
Residence



Point of
Diversion
Structure

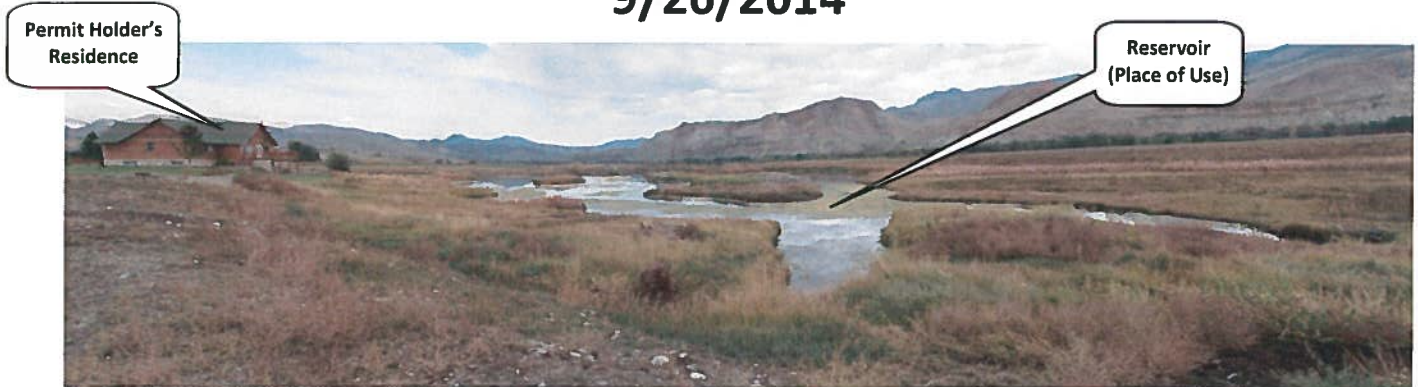
ABOVE: View looking along the north edge of the reservoir showing the point of diversion location. The point of diversion is a metal structure on the upstream end of a culvert under a roadway. Flashboards can be installed/removed in the structure to regulate water level in the reservoir.

BELOW: Close up view of point of diversion structure.



Flashboards

72-16909
Licensing Exam Photos
9/26/2014



ABOVE: Panoramic view of the reservoir (place of use) from the south end of the reservoir. The point of diversion is located at the far (north) end of the reservoir.

BELOW: View of water bubbling up (areas indicated by arrows) along the edge of the reservoir. Justin Farr (permit holder) indicated that water springs up all over in the reservoir with the larger springs being located near the center of the reservoir. Since water rises up in the reservoir it does not seem appropriate to require upstream and downstream measuring devices.

