

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 37-8303

Exam Date: 9/13/2013

1. Current Owner: CASA DEL NORTE LP
11204 N BAR 21 DR
GLENN'S FERRY ID 83623
(208) 366-7931
2. Accompanied by: Corey Skinner (IDWR) and John Mc Callum (via phone)
Phone No: 1-208-366-7931
Relationship to Permit Holder: New owner

3. SOURCE

UNNAMED STREAM

TRIBUTARY

ANTELOPE CREEK

B. OVERLAP REVIEW

1. Other water rights with the same place of use: 37-10595 and 37-19842 (separate springs/systems)
2. Other water rights with the same point of diversion: None

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

UNNAMED STREAM

L2 SW1/4NE1/4

Sec. 14, Twp 02S, Rge 10E, B.M.

ELMORE County

Method of Determination: **GPS at time of field exam.**

2.

PLACE OF USE: STOCKWATER STORAGE

Twp	Rge	Sec	NE				NW				SW				SE				
			<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>	<u>Totals</u>
02S	10E	14			X					X									
					L 2					L 3									

Method of Determination: **GPS and 2011 aerial imagery.****D. FLOW MEASUREMENTS**

1. Measurements: **N/A (on-stream storage)**

F. VOLUME CALCULATIONS

- Surface area of pond = 0.1 acres (per GIS shapefile for pond boundary using Esri aerial photography)
- Hydraulic height of the embankment was estimated at 5 feet (per field observation)
- Using the V-shaped reservoir capacity equation from the IDWR Field Examiners Handbook
- Capacity = Surface area x Maximum Depth x 0.4 = 0.1 acre x 5 feet x 0.4 = **0.2 acre-feet**

Precipitation deficit data from the University of Idaho ET website = 667 mm per acre for small stockwater ponds.

- $667/25.4/12 = 2.2 \text{ AF} \times 0.1 \text{ acre} = \mathbf{0.22 \text{ AF}}$

0.2 AF evaporative losses + 0.2 AF volume capacity = 0.4 AF

G. NARRATIVE/REMARKS/COMMENTS

Application for permit 37-8303 was filed on September 29, 1988 for 0.02 cfs of stockwater from a spring tributary to Camas Creek. The application indicated that the proposed diverting works would consist of either a stockwater pond or a system of stock troughs for 500 hundred head of cattle. Permit 37-8303 was approved on October 1, 1990 and proof was filed on September 6, 1990. On September 13, 2013 Corey Skinner and I conducted the licensing exam.

Corey and I observed a small pond (measured at 0.1 acres using GIS and aerial photography). The pond impounded water via an earth embankment with a hydraulic height of approximately 5 feet that had been constructed across an unnamed stream. It was estimated that the average depth of the pond was no more than 5 feet. As indicated in the volume calculations above, the pond's capacity is estimated at approximately 0.2 acre-foot. Precipitation deficit data from the University of Idaho ET website indicates a mean of 667 mm (2.2 AF) per acre for small stockwater ponds in the Fairfield area. Based on the calculated surface area of 0.1 acres, this indicates that approximately 0.2 AF could potentially evaporate from the ponds each year. Combining 0.2 AF storage and 0.2 AF for evaporative losses yields a volume of 0.4 AFA.

The permit was originally filed for 0.02 cfs of stockwater from a spring tributary to Camas Creek. After review it was clear that the intent was to create an on-stream pond for stockwater storage tributary to Antelope Creek (which is tributary to Camas Creek). An amendment was filed to drop the flow rate and change the use to stockwater storage with a volume component. The area surrounding the pond had visible signs of livestock use.

Recommend licensing 37-8303 for Stockwater Storage with a volume of 0.4 AFA.

Note, a Notice of Change of Ownership form (McGrew to Casa Del Norte, LLC) was filed with the Application for Amendment and will be processed simultaneously with the license.

Have conditions of permit approval been met? X Yes No

H. RECOMMENDATIONS**1. Recommended Amounts**

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>DIVERSION RATE</u>	<u>ANNUAL VOLUME</u>
STOCKWATER STORAGE	01/01 to 12/31	N/A	0.40 AF
	<u>Totals</u>	N/A	0.40 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 X Other

I. AUTHENTICATION

Field Examiner's Name Sara Deeder Date 11/15/13
 Reviewer [Signature] Date 11/18/13



SENW 3

14

SWNE 2

2S10E

