

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 63-34682
Exam Date: 9/5/2023

1. Current Owner:
JEFF DANCER
411 E KARCHER RD
NAMPA ID 83687-3001
2. Accompanied by: Kent Aasa, IDWR Agent. Mr. Dancer gave us permission to visit the property.

3. **SOURCE:**
DIXIE SLOUGH

Tributary
BOISE RIVER

Method of Determination: Aerial Photography, ArcMap, and Site Visit.

B. OVERLAP REVIEW

1. Other water rights with the same place of use: YES Overlap

Water Right No.	Source	Purpose of Use	Basis
63-222D, 63-223K, 63-3572	Boise River	Irrigation	Decreed
63-21361, 63-21362	Boise River	Irrigation	Decreed
63-21363, 63-32241	Boise River	Irrigation	Decreed

Comments: Research of Department records, ArcMap, Eureka Ditch Co No 2 water rights

2. Other water rights with the same point-of-diversion: YES Overlap

Water Right No.	Source	Purpose of Use	Basis
63-21616	Dixie Slough	Irrigation/Stockwater	Decreed
63-11306	Dixie Slough	Wildlife	License
63-34993	Dixie Slough	Irrigation	Permit

Comments: Research of Department records, ArcMap

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

DIXIE SLOUGH SE¼ NE¼, Sec. 1, Twp 04N, Rge 05W, B.M. CANYON County

Method of Determination: Aerial Photography, ArcMap, and Site Visit.

PLACE OF USE: IRRIGATION

Twp	Rng	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
05N	05W	36												9.0					9.0

Total Acres: 9.0

PLACE OF USE: WILDLIFE

Twp	Rng	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
05N	05W	36												X					

PLACE OF USE: WILDLIFE STORAGE

Twp	Rng	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
05N	05W	36												X					

PLACE OF USE: RECREATION

Twp	Rng	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
05N	05W	36												X					

PLACE OF USE: RECREATION STORAGE

Twp	Rng	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
05N	05W	36												X					

Method of Determination: Aerial Photography, ArcMap, and Site Visit, and phone conversation with Jeff Dancer permit holder

3.

 X Delivery System Diagram Attached (required). Indicate all major components and distances between components. Indicate weir size/pipe as applicable.

 X Map Attached Showing Location(s) of point(s) of diversion and place(s) of use (required). Scale must be 1:24,000 or greater.

 X Aerial Photo Attached (required for irrigation of 10+ acres).

 X 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					

D. FLOW MEASUREMENTS

1.

Measurement Equipment	Type	Make	Model No.	Serial No.	Size	Calib. Date
N/A						

2. Measurements: The point of diversion measuring device is a Submerged Rectangular Orifice.
The orifice measures 9" X 16" = 144" ÷ 12" = 1 ft²

E. FLOW CALCULATIONS

Additional Computation Sheets Attached

Measured Method:

Using the Water Measurement Manual, from the U.S. Department of the Interior, Bureau of Reclamation Table A9-2 (page A-32) shows that a fully contracted standard submerged rectangular orifice with an area of 1.0 ft² and with head 0.80 Δh ft. = 4.38 cfs. The high-water mark is between 0.8 to 1.1 on the staff gage (see pictures).

Irrigation flow rate is 0.02 cfs per acre x 9.0 acres = 0.18 cfs

Therefore, I recommend the maximum permitted diversion rate of 1.350 cfs.

F. VOLUME CALCULATIONS**1. Volume Calculations for Other Uses: Storage uses**

The volume for storage was calculated by using the surface area and average depth.

Surface area is approximately up to 9 acres, and the average depth is approximately up to 18 inches, or 1.5 feet.

Therefore 9 acres X 1.5 feet = 13.5 AF. This exceeds the condition on the permit that "The three (3) ponds established by the storage of water under this right shall not exceed a total capacity of 11.7 acre-feet or a total surface area of 8.9 acres".

Therefore, I recommend the maximum permitted storage volume of 11.7 acre-feet and the permitted maximum surface area of 8.9 acres.

2. Volume Calculations for Other Uses: Wildlife, and Recreation uses

Mr. Dancer indicated that they fill the ponds around the first of November and run water through them until the end of February. November 1 – February 28 = 120 days.

The volume for wildlife and recreation was calculated by 1.350 cfs X 1.9835 af X 120 days = 321.3 af/a

Therefore, I recommend a volume for wildlife and recreation uses as 321.3 AF

G. NARRATIVE/REMARKS/COMMENTS

The Beneficial use field exam for permit 63-34682 was completed on September 5, 2023, with Kent Aasa IDWR Agent and myself after Jeff Dancer (permit holder) gave us permission to visit the property. He was out of the area at the time the field exam was conducted. Information about the system was obtained from Mr. Dancer through emails and phone conversations. Water is diverted from the Dixie Slough into a canal that travels north to a fully contracted submerged rectangular orifice measuring device. Water continues west by northwest to the place of use. The water is used for irrigation, wildlife, recreation, diversion to storage, and wildlife and recreation storage. The use consists of irrigating vegetation in the irrigation season for spring feeding and cover for local and migrating birds (wildlife habitat) and then filling the ponds for wildlife and recreation storage (hunting and photography of waterfowl).

Water runs from the canal into a 36" standpipe. Two separate pipes then deliver water to the ponds. As the ponds fill, there is a pvc pipe installed in the berms that connects each pond together. Once water reaches the level of the pipe in the berm it flows through to the next pond. The ponds are designed to be a flow through system. The flow through design allows for the growth of vegetation for spring feeding and cover for local and migrating birds. This also allows water to circulate so the ponds don't completely freeze over in the winter. Mr. Dancer indicated that the ponds are filled once a year to approximately one and a half feet on average for wildlife and recreation storage. He also indicated that water flows non-stop from 11/1-2/28 and keeps refilling for wildlife and recreation uses. Excess water drains directly back into the Dixie Slough when the ponds are full.

Have conditions of permit approval been met? ☒ Yes ☐ No

H. RECOMMENDATIONS**1. Recommended Amounts**

Beneficial Use	Period of Use	Rate of Diversion	Annual Volume
IRRIGATION	03/01 to 11/15	0.18 CFS	

WILDLIFE	11/01 to 02/28	1.35 CFS	321.3
WILDLIFE STORAGE	11/01 to 02/28		11.7 AF
RECREATION	11/01 to 02/28	1.35 CFS	321.3
RECREATION STORAGE	11/01 to 02/28		11.7 AF
DIVERSION TO STORAGE	11/01 to 02/28	1.35 CFS	

Totals: 1.35 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 ☒ None

I. AUTHENTICATION Benny Walker -

Field Examiner's Name Benny Walker Date 10/2/2023
Reviewer [Signature] Date 11/30/2023



Above: Measuring device from the Dixie Slough, fully contracted standard submerged rectangular orifice with an area of 1.0 ft² Water then flows into the delivery ditch to the standpipe.



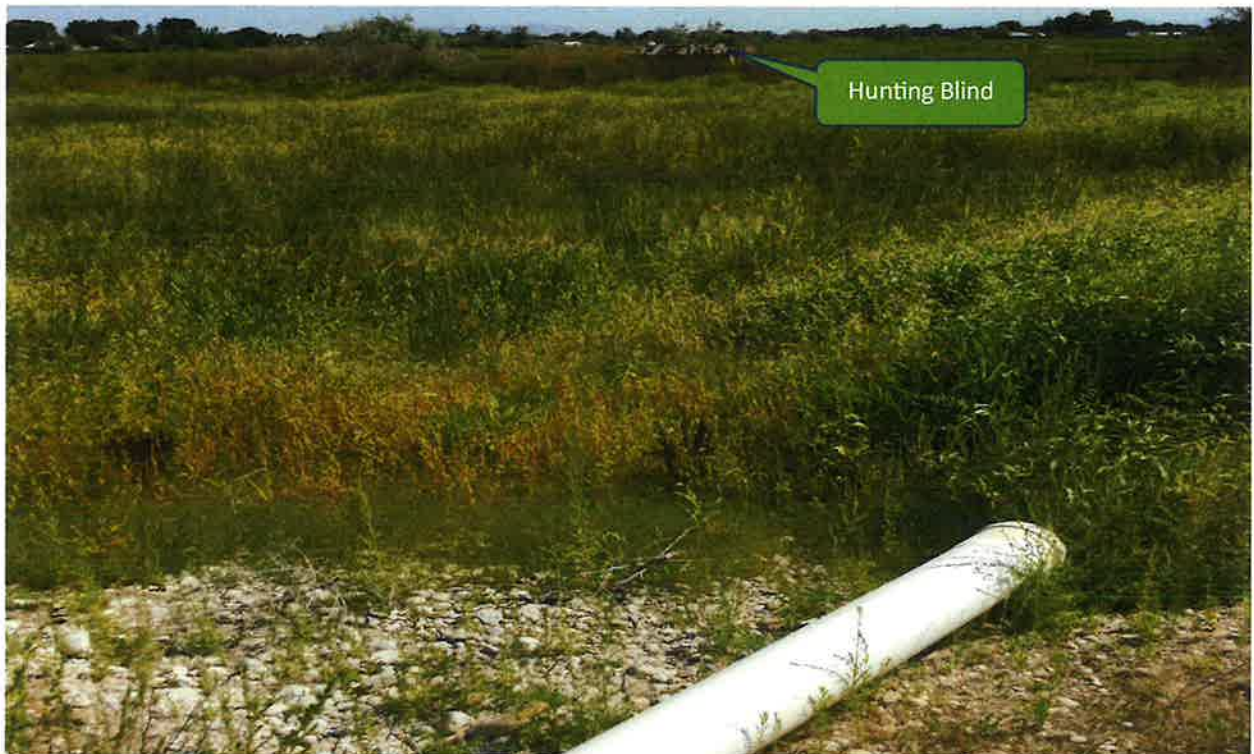
Above: Standpipe receives water from the delivery ditch, for the ponds



Above: First pond irrigation with wildlife vegetation and habitat



Above: The second pond irrigation and vegetation for wildlife habitat.



Above: Pipe to the eastside of the second pond



Above: Third pond irrigation and vegetation for wildlife habitat



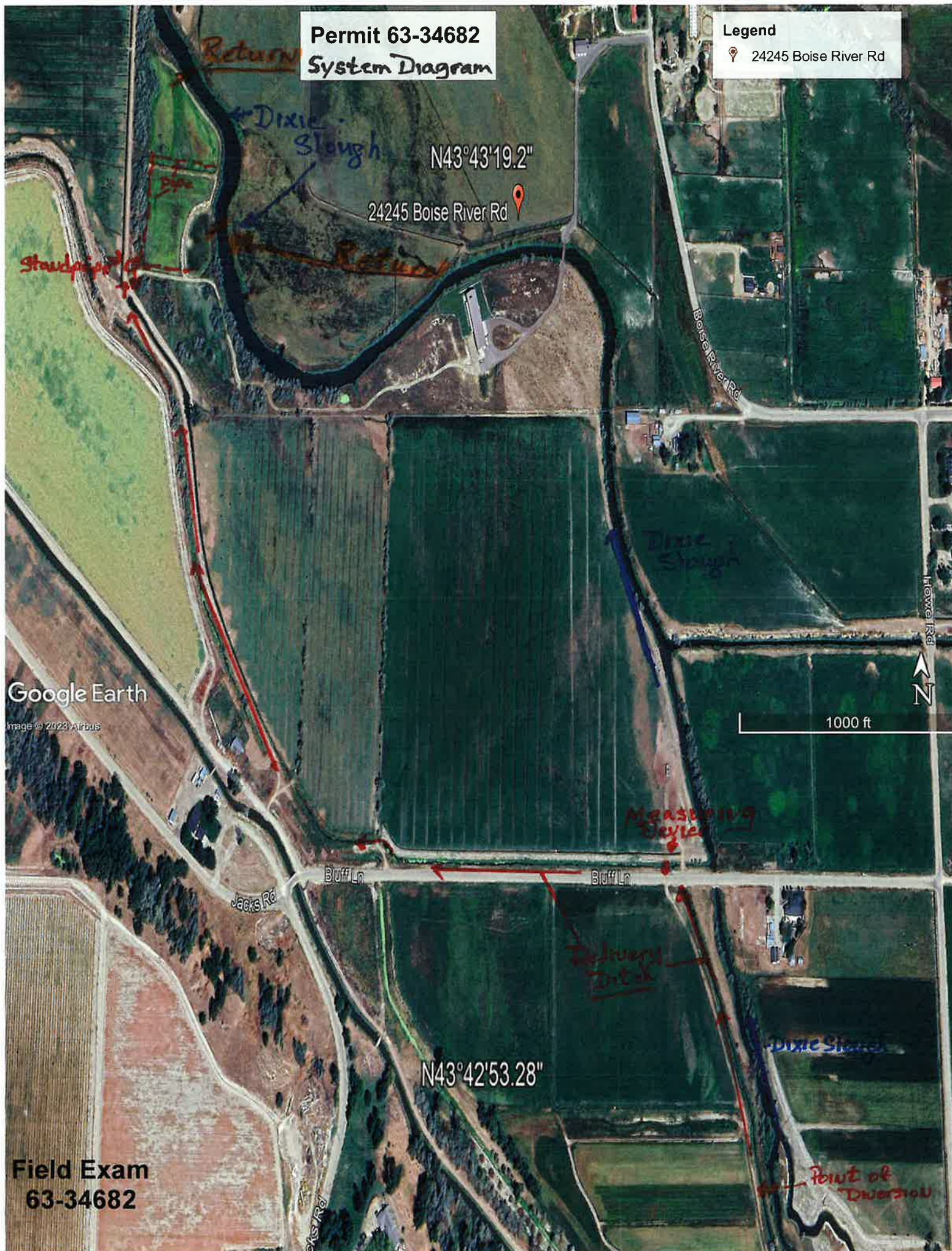
Above: Second pond outlet to the Dixie Slough



Above: Third pond outlet to the Dixie Slough

Permit 63-34682
System Diagram

Legend
📍 24245 Boise River Rd



Google Earth
Image © 2023 Airbus

1000 ft



Field Exam
63-34682

State of Idaho
Department of Water Resources

Water Right

63-34682

Irrigation, Wildlife, Recreation, Wildlife Storage,
Recreation Storage, Diversion to Storage



-  Place Of Use Boundary
-  Townships
-  PLS Sections
-  Quarter Quarters