

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 65-23741
Exam Date: 07/06/2023

- Current Owner:
BIG WILLOW RANCH LLC C/O JG SCHWARZ
1 DIXIE LN PAYETTE ID 83661-5030
- Accompanied by: Conducted exam independently with the permission from JG Schwarz
Phone No: (208) 739-1939
Relationship to permit Holder: Sole partner of Big Willow Ranch LLC

3. **SOURCE:**
DRY CREEK

Tributary
BIG WILLOW CREEK

Method of Determination: Site visit, aerial imagery

B. OVERLAP REVIEW

- Other water rights with the same place of use: 65-2204, 65-3247, 65-3248, 65-7136, 65-7603, 65-22979, 65-23479, 65-2500, 65-2501, 65-3125, 65-3126, 65-3127, 65-3128, 65-7789, 65-9076, 65-10533, 65-10534, 65-10535, 65-10536, and 65-2601
- Other water rights with the same point-of-diversion: 65-22979, 65-7136, 65-7603, and 65-23479

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

DRY CREEK NE¼ SE¼, Sec. 27, Twp 09N, Rge 02W, B.M. PAYETTE County

Method of Determination: Field exam and confirmed by aerial imagery

PLACE OF USE: IRRIGATION 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	
09N	02W	26							X			X							
09N	02W	27													X	X			

PLACE OF USE: IRRIGATION FROM 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	
08N	02W	3				12.0		4.0 L4			15.0		32.0	36.0	33.0	37.0	24.0	8.0	201.0
08N	02W	4			2.0	24.0					22.0	23.0	38.0	38.0	32.0	23.0	21.0	27.0	250.0
08N	02W	5											18.0	21.0			27.0	36.0	102.0
08N	02W	7	19.0		18.0	25.0					10.0	1.0 L3	3.0 L4	2.0	6.0	25.0			109.0
08N	02W	8	23.0	29.0	16.0	19.0	18.0	30.0	27.0	39.0	13.0	2.0				1.0			217.0
08N	02W	9	14.0	14.0	16.0	7.0	29.0	24.0	13.0	3.0									120.0
08N	02W	10		24.0	2.0		25.0	30.0	19.0	24.0									124.0
08N	03W	11									1.0		29.0	38.0	2.0	1.0	34.0	40.0	145.0
08N	03W	12									14.0	10.0	40.0	39.0	2.0	19.0	30.0	3.0	157.0
08N	03W	13					1.0	14.0											15.0
08N	03W	14	19.0	16.0			9.0												44.0
09N	02W	34							12.0			14.0	10.0						36.0

Total Acres: 1,520.0

Method of Determination: Field exam and confirmed by aerial imagery

3.

Delivery System Diagram Attached (required). Indicate all major components and distances between components.

X 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	N/A	N/A	N/A	N/A	N/A

D. FLOW MEASUREMENTS

1.

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

2. Measurements: No flow measurements required. On-stream storage verified. No diversion to storage needed. License to be issued in volume only.

E. FLOW CALCULATIONS

N/A Additional Computation Sheets Attached

Measured Method: No flow calculations required. On-stream storage verified, therefore no diversion to storage needed. License to be issued in volume only.

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

Irrigation Storage:

Per the design documentation report submitted to the Dam Safety section at the time of development, the reservoir capacity was designed for 77 af. The permitted POU for irrigation storage also included a section of canal that also stores water. That section was calculated at a capacity of another 4 af, for a total capacity of 81 af. Therefore, recommended volume for irrigation storage is 81 af. See email from Manel Rauhut dated April 4, 2024. No refills were requested in the original application, and none were included on the permit.

Irrigation from Storage:

The permitted volume for irrigation from storage directly relevant to the irrigation storage component and is therefore recommended as 81 af.

Irrigation Storage	81 AF
Irrigation from Storage	81 AF
<u>License Recommendation</u>	<u>81 AF</u>

G. NARRATIVE/REMARKS/COMMENTS

A field exam was conducted on 07/06/23 by Senior Water Right Agent Laura McSherry independently with permission from JG Schwarz, sole partner of Big Willow Ranch LLC. The permit was issued on January 29, 2020, and proof of beneficial use was submitted on December 18, 2020.

The point of diversion (POD) location was confirmed at a feeder canal above the diversion dam on Dry Creek Reservoir impounding surface runoff in a smaller reservoir from Dry Creek and is accurately described by the permit. The feeder canal has a capacity of 300 cfs as noted by A & B Engineering in their 1974 report. The feeder canal has a gate structure that uses stop logs to control flow to the reservoir. Conveyance in the canal flows from the northeast to the southwest. Water right overlap discovered water rights 65-22979, 65-7136, 65-7603, and 65-23479 associated with the POD. No amendment required to correct the legal description of the POD.

Although the permit authorizes appropriation of 200 AF for irrigation from storage and 200 AF for irrigation storage, the design plans submitted to the dam safety program were for a reservoir capacity of 77 af, and another 4 af of storage in the canal. Water diverted from the reservoir via a 24" gravity fed main line. The main line distributes water to the varying pivots within the POU and has control valves throughout the system to adjust flow rates and direction. ArcMap tools and aerial imagery were used to verify the POU area. No amendment required to correct the legal description of the POU.

Water right overlap review for the irrigation from storage discovered water rights 65-2204, 65-3247, 65-3248, 65-7136, 65-7603, 65-22979, 65-23479, 65-2500, 65-2501, 65-3125, 65-3126, 65-3127, 65-3128, 65-7789, 65-9076, 65-10533, 65-10534, 65-10535, 65-10536, and 65-2601 POU overlap. Since the water is officially appropriated once it is stored in the reservoir and can be applied as the owner sees fit within the described POU, so long as no more than 5 af/ac is diverted from the reservoir, and no more than 4.5 af/ac is diverted at the field headgate, no combined use conditions are required with the overlapping rights for the irrigation from storage. No amendment required to correct the legal description of the POUs.

No diversion rate is associated with this water right, as the reservoir was developed on-stream on Dry Creek. The development of the irrigation from storage POU was confirmed using historic satellite imagery and photos from another license field exam on the property during peak irrigation season. Volume calculations for each use determined license recommendations as follows: Irrigation storage 81 AF and irrigation from storage 81 AF.

Condition 121 was updated to 103 as per department standards. Condition 01H was updated to R02, and 18B was updated to R40. Condition R65 was added to explain the duty of water at the field headgate. Condition 220 was updated to reflect the true capacity of the reservoir. Conditions R70,074, R05, ,18C ,185, and 004 were carried on to the license.

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

H. RECOMMENDATIONS

1. Recommended Amounts

<u>Beneficial Use</u>	<u>Period of Use</u>	<u>Rate of Diversion</u>	<u>Annual Volume</u>
IRRIGATION STORAGE	01/01 to 12/31		81 AF
IRRIGATION FROM STORAGE	03/01 to 11/15		81 AF

Totals:

81 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

Marcelina Williams – Water Resource Agent, Sr.

Field Examiner's Name

Marcelina Williams

Date

04-16-2024

Reviewer

[Signature]

Date

4/17/2024

DELIVERY SYSTEM DIAGRAM

Water Right No. 65-23741

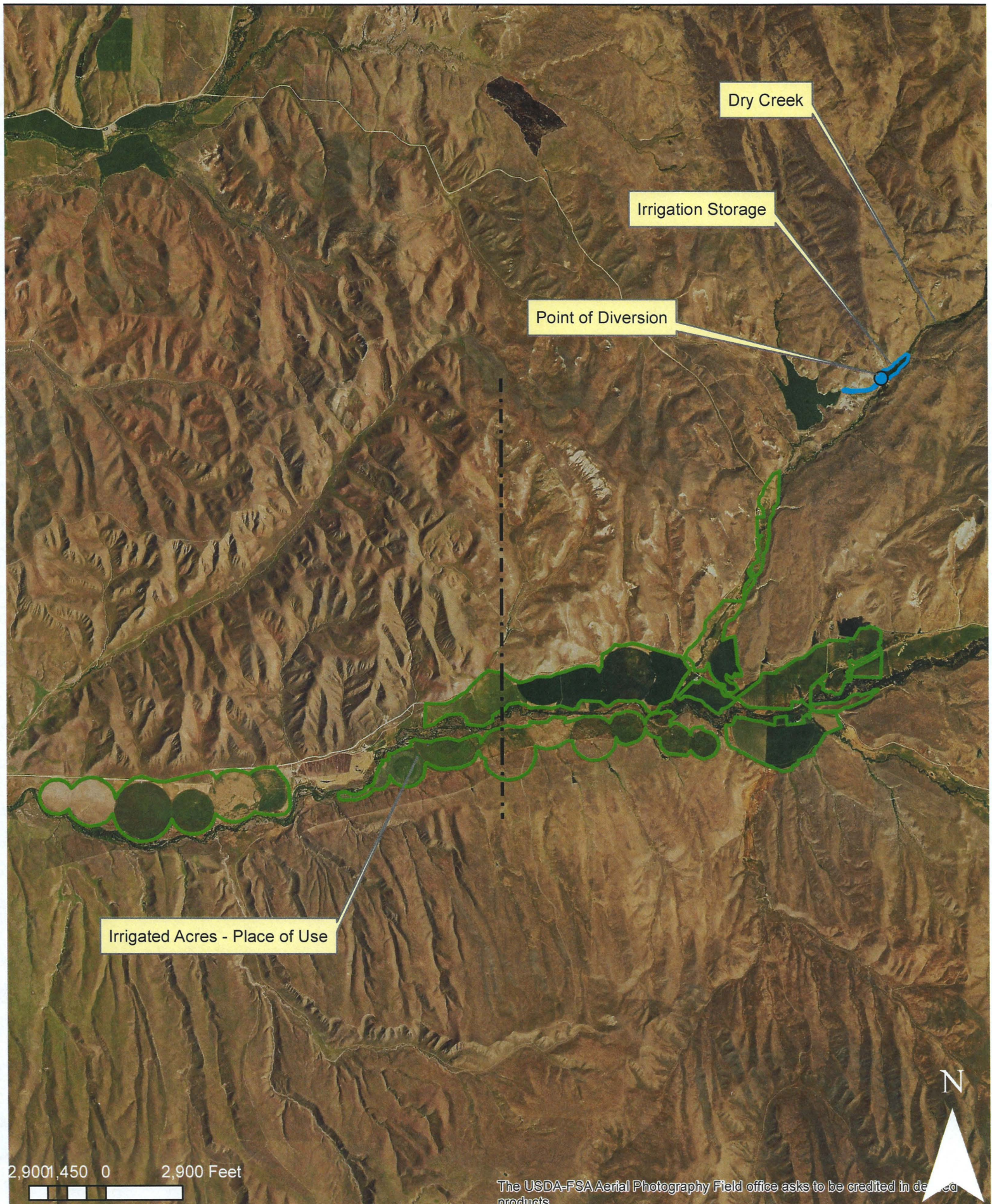




Fig. 1 – View of on-stream irrigation storage place of use (POU). Dry Creek noted with red arrow. View looking NE.



Fig. 2 – Water is controlled and conveyed from the irrigation storage POU through a canal to the Dry Creek Reservoir. Point of Diversion (POD) location noted with red arrow. View looking NE.

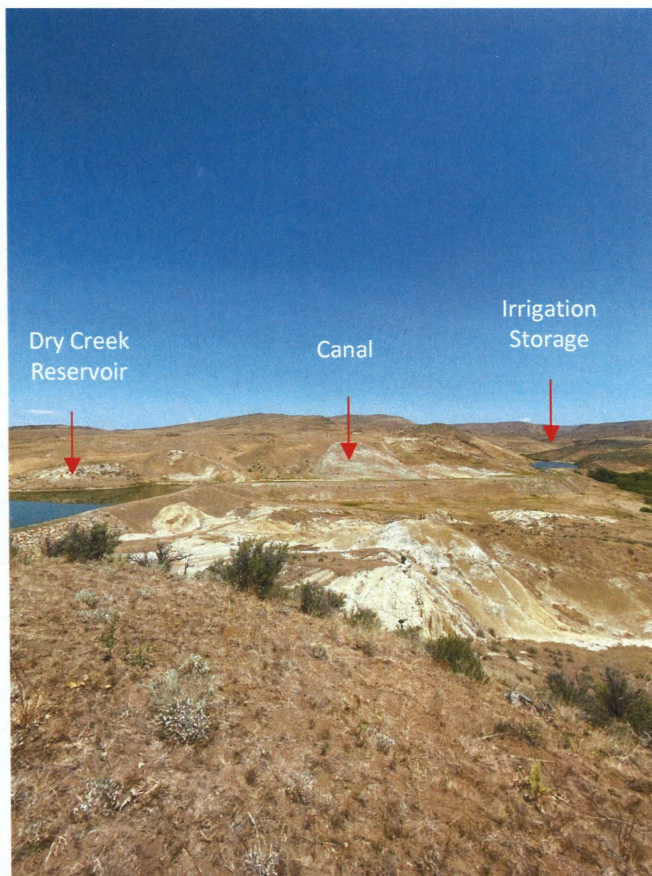


Fig. 3 – Canal conveyance
into Dry Creek Reservoir.
Views looking N.





Fig. 4 – View of Dry Creek Dam and Reservoir system.



Storms, Scott

From: Rauhut, Manuel
Sent: Thursday, April 4, 2024 1:06 PM
To: Storms, Scott
Subject: 65-23741 Liscence -- Dry Creek Diversion Dam Storage Capacity

Scott –

This is with regards to the storage capacity of Dry Creek Diversion Dam following the 2014 dam raise/storage capacity increase:

The Final Design Documentation Report, prepared by McMillen, LLC and STRATA, Inc., includes the following stage storage curve, which the dam safety program also uses as a basis for storage capacity of 77 ac-ft:

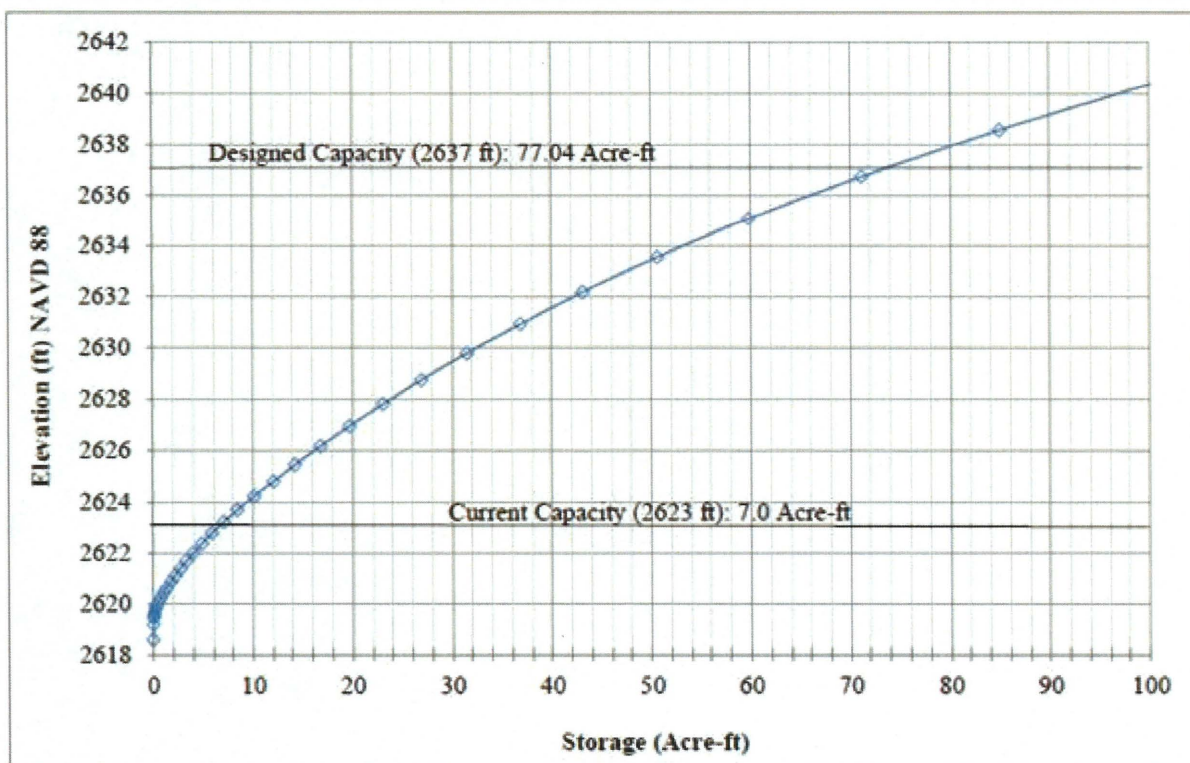


Figure 4-2. Stage Storage Curve for Diversion Dam Reservoir

There is a canal between the Dry Creek Main Reservoir and the Dry Creek Diversion Reservoir, which is included on the water right map. Note that this canal has been rerouted since the licensing exam, but the following estimate of storage within the

somewhat trapezoidal shaped canal is based on the original canal configuration (as it was during the licensing exam):

Assumptions:

Length: 1,510 ft (measured in google earth)

Average width: 18 ft (the canal width was quite variable, both in terms of base width and water surface elevation width)

Depth: 6 ft

Volume: $1,510 \text{ ft} \times 18 \text{ ft} \times 6 \text{ ft} = 163,080 \text{ ft}^3 = 3.74 \text{ ac-ft} \approx 4 \text{ ac-ft}$

Therefore, the total storage capacity on the water right should be $77 \text{ ac-ft} + 4 \text{ ac-ft} = \underline{81 \text{ ac-ft}}$.

Please let me know if you have any questions.

Thanks,
Manuel