

MEMORANDUM

TO: Water Right File 31-2465
FROM: Aaron Marshall
DATE: August 4, 2010
SUBJECT: Ball Land LC Rental Application

SUMMARY

Ball Land LC requests the rental of ground water from the Water Supply Bank for the irrigation of 15 acres of land near the town of Hamer in Jefferson County. Ball Land is seeking a five year rental period from 2011 through 2015 (confirmed per telecom with Carl Ball, August 4, 2010). The annual field headgate requirement for irrigation in this area is 52.5 acre-feet (3.5 af/ac) while the maximum annual consumptive irrigation requirement is 37.5 acre-feet (2.5 af/ac).

The following water right is leased to the Bank in an amount that can satisfy the rental:

<u>Water Right No.</u>	<u>Diversion Rate</u>	<u>Annual Volume</u>	<u>Acres</u>	<u>Period</u>
31-2465	0.27 cfs	63 af	18 ac	Indefinite

ESPAM

Since the proposed rental will result in a change to a point of diversion within the Eastern Snake Plain Aquifer, the Department's ESPAM Model transfer tool should be used to simulate the effects to the Snake River.

The map in **Attachment 1** shows the locations of the points of diversion associated with the proposed rental. The authorized point of diversion for water right 31-2465 is located in model cell row 27, column 157. The point of diversion proposed for use in the rental is located in model cell row 42, column 168.

The total maximum annual consumptive use for the proposed rental is 37.5 acre-feet. For irrigation, the consumptive use over the course of a year may be estimated using $\frac{1}{3}$ of the annual volume in the spring trimester (13 af) and $\frac{2}{3}$ of the annual volume in the summer trimester (25 af).

The current rental application was received in February 2010 and proposes a five year rental period. Five years of use, from 2011 through 2015, should be simulated to estimate the effects this change will have on the flows in the Snake River. **Attachment 2** provides a summary of the ESPAM transfer tool input data. **Attachment 3** provides a summary of the results of the simulation during the proposed rental period.

The maximum increase in depletion to the Snake River is expected to occur in the Ashton to Rexburg reach at an estimated 0.8 acre-feet during the summer trimester of 2015. Pursuant to the guidance provided in Transfer Processing Memo No. 24, mitigation is not required since the increased depletion is less than 2 acre-feet per trimester.

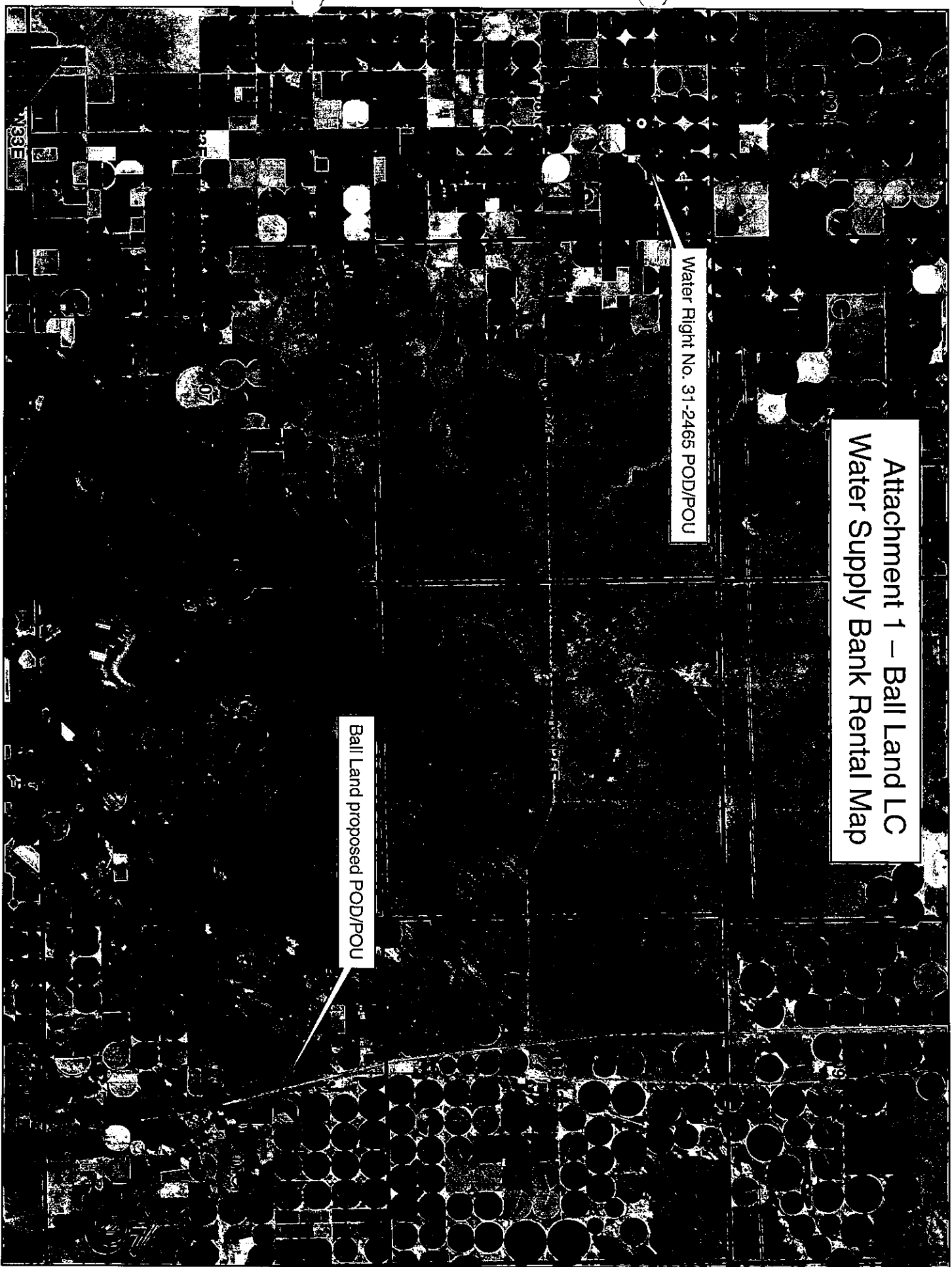
WATER DISTRICT

The proposed rental is located within State Water District No. 110. IDWR will seek comments from the watermaster prior to executing a rental agreement.

Attachment 1 – Ball Land LC
Water Supply Bank Rental Map

Water Right No. 31-2465 POD/POU

Ball Land proposed POD/POU

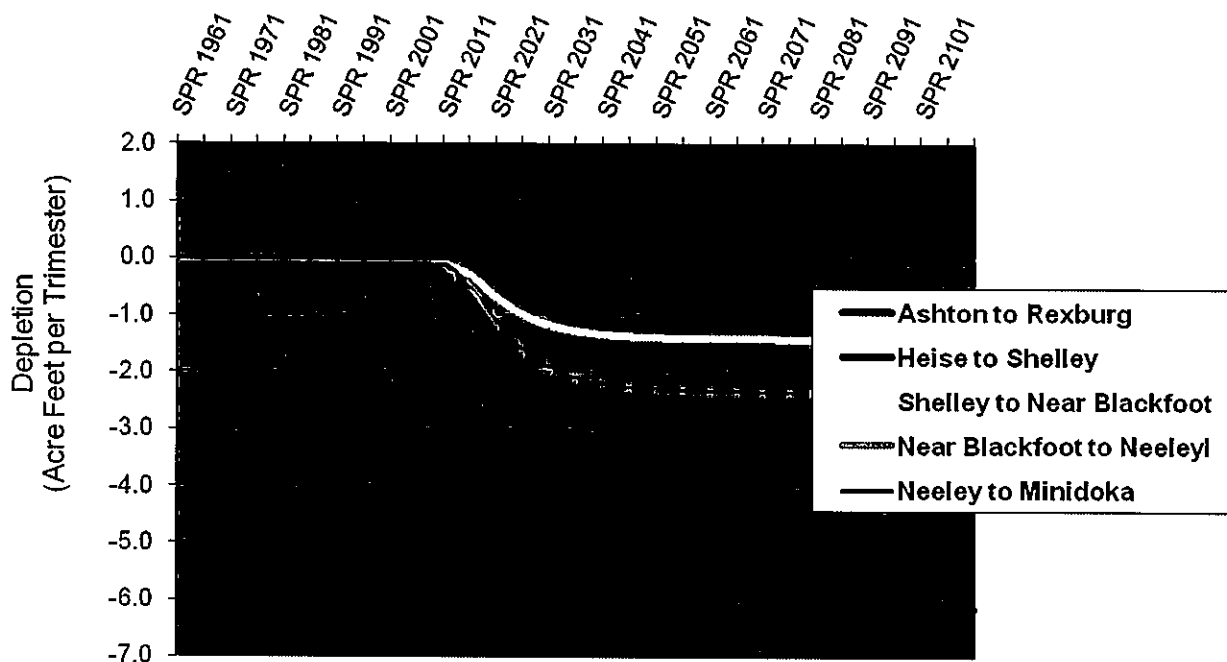


Attachment 2 – ESPAM Transfer Tool Input Data Summary

TRIMESTER OF ACTIVITY	TO WELL	FROM1 WELL	
	<u>Projected Use</u> AF/TRIMESTER	<u>With Transfer</u> AF/TRIMESTER	<u>Without Transfer</u> AF/TRIMESTER
SPR 1961	0	13	13
SUM 1961	0	25	25
WIN 1961	0	0	0
SPR 1962	0	13	13
SUM 1962	0	25	25
WIN 1962	0	0	0
SPR 1963	0	13	13
SUM 1963	0	25	25
↓	↓	↓	↓
SPR 2007	0	13	13
SUM 2007	0	25	25
WIN 2007	0	0	0
SPR 2008	0	0	13
SUM 2008	0	0	25
WIN 2008	0	0	0
SPR 2009	0	0	13
SUM 2009	0	0	25
WIN 2009	0	0	0
SPR 2010	0	0	13
SUM 2010	0	0	25
WIN 2010	0	0	0
SPR 2011	13	0	13
SUM 2011	25	0	25
WIN 2011	0	0	0
SPR 2012	13	0	13
SUM 2012	25	0	25
WIN 2012	0	0	0
SPR 2013	13	0	13
SUM 2013	25	0	25
WIN 2013	0	0	0
SPR 2014	13	0	13
SUM 2014	25	0	25
WIN 2014	0	0	0
SPR 2015	13	0	13
SUM 2015	25	0	25
WIN 2015	0	0	0

Attachment 3 – ESPAM Transfer Tool Results Summary

Net Transfer Effect Above Milner (Total Effect With Transfer - Total Effect Without Transfer)



Net Transfer Effect (AF/trimester)

Trimester	Ashton to Rexburg	Heise to Shelley
SPR 2011	-1.1	-0.4
SUM 2011	-0.6	-0.2
WIN 2011	-0.6	-0.1
SPR 2012	-0.5	-0.1
SUM 2012	0.0	0.1
WIN 2012	-0.1	0.1
SPR 2013	0.0	0.1
SUM 2013	0.4	0.3
WIN 2013	0.3	0.2
SPR 2014	0.2	0.2
SUM 2014	0.6	0.4
WIN 2014	0.5	0.3
SPR 2015	0.4	0.3
SUM 2015	0.8	0.4
WIN 2015	0.6	0.4

MEMORANDUM

TO: Aaron Marshall
FROM: Brian Ragan
DATE: July 22, 2010
SUBJECT: Ball Land LC Water Supply Bank Rental Application

SUMMARY

On February 1, 2010, IDWR received an application to rent water from the Water Supply Bank from Ball Land LC. Carl M. Ball signed the application. The applicant proposes to use 52.5 acre-feet of water for the irrigation of 15 acres for a period of 5 years.

The source of water is listed as "well" and the use is "irrigation".

The applicant indicated that they stopped watering the aforementioned 15-acre parcel due to over-use of water right no. 31-2399. This is a confusing statement due to the fact that IDWR GIS coverage indicates water diverted under water right no. 31-2399 is not authorized for use on the proposed 15-acre POU applied for. On a side note, the 15-acre proposed POU is covered by water right no. 31-10657 for domestic and stock watering use.

AUTHORITY TO FILE

Carl M. Ball (signatory) is listed as the sole registered agent for this company on the Idaho.gov business entity search page.

SUFFICIENCY OF SUPPLY

An application to lease a portion of water right no. 31-2465 was accepted into the Water Supply Bank for an indefinite period of time on April 7, 2008. Although this right is not the closest lease to the rental POU, renting this right makes the most sense as it satisfies the "first in, first out" rule and also is available for the entire requested rental period of 5 years. The portion leased is for pivot corners not irrigated by the center pivot. IDWR only has infrared satellite imagery for this area from the present day back through the 2006 irrigation season. These images for these years indicate the pivot corners have been unused through this time. Images from years prior to 2006 can be obtained but would have to be downloaded from an external site by the IDWR GIS Program.

Water right no. 31-2465 authorizes the use of water for irrigation of 160 acres and is limited to a diversion rate of 2.42 cfs and 560 acre-feet per year ($560 / 160 = 3.5$ acre-feet per acre). The standard consumptive rate irrigation requirement in this area is 2.5 acre-feet per acre with a head gate requirement of 3.5 acre-feet per acre. As per the Water Supply Bank database the portion of this right available is limited to a diversion rate of 0.27 cfs to irrigate 18 acres. The diversion rate for this rental is calculated in the following way: $(2.42 \text{ cfs} / 160 \text{ acres}) \times 15 \text{ acres} = 0.23 \text{ cfs}$.

The applicant proposes to divert a volume of 52.5 acre-feet of water ($15 \text{ acres} \times 3.5 \text{ acre-feet per acre}$). The rental cost is calculated in the following way: $52.5 \text{ acre-feet} \times \$14 \text{ per acre-foot} = \$735 \text{ per year}$ or \$3,675 for 5 years.

INJURY

Will there be injury to other water rights caused by the rental? No

ENLARGEMENT

Will the rental enlarge the use of water under the rented right(s)? No.

BENEFICIAL USE

Will the water be used for a beneficial purpose? Yes. The use of water for irrigation is a recognized beneficial use of water.

LOCAL PUBLIC INTEREST

Is the proposed rental in the local public interest? Yes.

WATER DISTRICT

Is the proposed rental in a water district? Yes. The proposed POU lies within Water District 31 and 110 according to the Administrative Area Results.

RECOMMENDATION

The rental may be approved, as described below:

Water Right No. 31-2465

Diversion Rate: 0.23 cfs

Volume: 52.5 acre-feet

Rental Fee: \$3,675 for 5 years (\$735 per year)

Season of Use: 4/1 to 10/31

Rental Period: April 1, 2010 through October 31, 2015



State of Idaho

DEPARTMENT OF WATER RESOURCES

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C. L. "BUTCH" OTTER
Governor

GARY SPACKMAN
Interim Director

February 5, 2010

Ball Land LC
PO Box 69
Lewisville, ID 83431

RE: APPLICATION(S) TO RENT WATER FROM THE WATER SUPPLY BANK

Dear Applicant:

The Idaho Department of Water Resources (Department) acknowledges receipt of your application(s) to rent water from the Idaho Water Resource Board's Water Supply Bank (Bank). The Department will review your application(s) as resources allow. If the application(s) is not processed prior to the end of the proposed rental period, it will be returned to the applicant. The Department regrets any inconvenience caused by the delay. Please note that you are not authorized to use water without a valid water right or an approved Water Supply Bank rental agreement.

Additional information about the Bank may be found on the Department's web site at:

<http://www.idwr.idaho.gov/>

Sincerely,

A handwritten signature in cursive script that reads "Aaron Marshall".

Aaron Marshall
Sr. Water Resource Agent
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