

MEMORANDUM

TO: Monica Van Bussum
FROM: Brian Ragan
DATE: October 18, 2010
SUBJECT: Klosterman Water Supply Bank Rental Application

SUMMARY

On April 2, 2009 IDWR received an application to rent water from the Water Supply Bank from Kent Klosterman. The applicant proposes to use 140 acre-feet of water for the irrigation of 35 acres for a period of 15 years. After discussing the issues surrounding a 15 year lease with the applicant, the applicant submitted a letter amending the rental period down to 5 years. Rented water will be diverted from the same POD as water right no. 36-8432, therefore, a measurement condition and water district jurisdiction should be applied to the rental agreement.

The period of this rental would have been from April 2009 through October 2013, however as per internal guidance from Shelley Keen this rental application is only processed for the current and future years. Therefore the period of this lease is 4-years from April 2010 through October 2013.

AUTHORITY TO FILE

Patricia Fenton is listed as the owner of the proposed POU according to IDWR's GIS taxlot layer. The applicant owns the adjacent land but farms the land as one field.

SUFFICIENCY OF SUPPLY

An application to lease water to the Water Supply Bank from water right no. 36-16702 was received by IDWR on February 18, 2010. Leasing this right does not satisfy the "first in, first out" rule however, this lease is in close proximity (2 miles) to the proposed rental POU which implies a strong hydraulic connection. A POU transfer for this right was approved on October 29, 2009. The portion to be leased authorizes the use of water for 5-years for the irrigation of 18.6 acres and is limited to a diversion rate of 0.37 cfs and 74.4 acre-feet per year (74.4 acre-feet / 4 acre-feet per acre = 18.6 acres). The rental fee for water right no. 36-16702 is calculated in the following way: 74.4 acre-feet x \$14 per acre-foot = \$1,041.60 per year x 4 years = \$4,166.40 for 4 years.

An application to lease water to the Water Supply Bank from water right no. 36-16148 was received by IDWR on October 22, 2009. The portion to be leased authorizes the use of water indefinitely for the irrigation of 3.6 acres and is limited to a diversion rate of 0.05 cfs and 14.4 acre-feet per year (14.4 acre-feet / 4 acre-feet per acre = 3.6 acres). The rental fee for water right no. 36-16148 is calculated in the following way: 14.4 acre-feet x \$14 per acre-foot = \$201.60 per year x 4 years = \$806.40 for 4 years.

Water right no. 36-16178 was accepted into the WSB for an indefinite period of time on ^{Oct 3, 2007} May 2, 2005. MVB
The portion leased authorizes the use of water for an indefinite period of time for the irrigation of 13 acres and is limited to a diversion rate of 0.26 cfs and 52 acre-feet per year (52 acre-feet / 4 acre-feet per acre = 13 acres). The rental fee for water right no. 36-16178 is calculated in the following way: 52 acre-feet x \$14 per acre-foot = \$728 per year x 4 years = \$2,912 for 4 years.

Are there lease applications that may provide a sufficient supply? Yes. The application to lease water right nos. 36-16702 and 36-16148 should be accepted into the Water Supply Bank.

INJURY

IDWR's ESPAM Transfer Tool and Mitigation Analysis Tool results indicate full mitigation is required. See attached pages. The mitigation volume is calculated as 2.3 acre-feet per trimester or 6.9 acre-feet per year. Therefore the applicant will rent an additional 6.9 acre-feet of water per year but not be allowed to use it.

ENLARGEMENT

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

BENEFICIAL USE

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

The proposed rental lies within Water District 130.

RECOMMENDATION

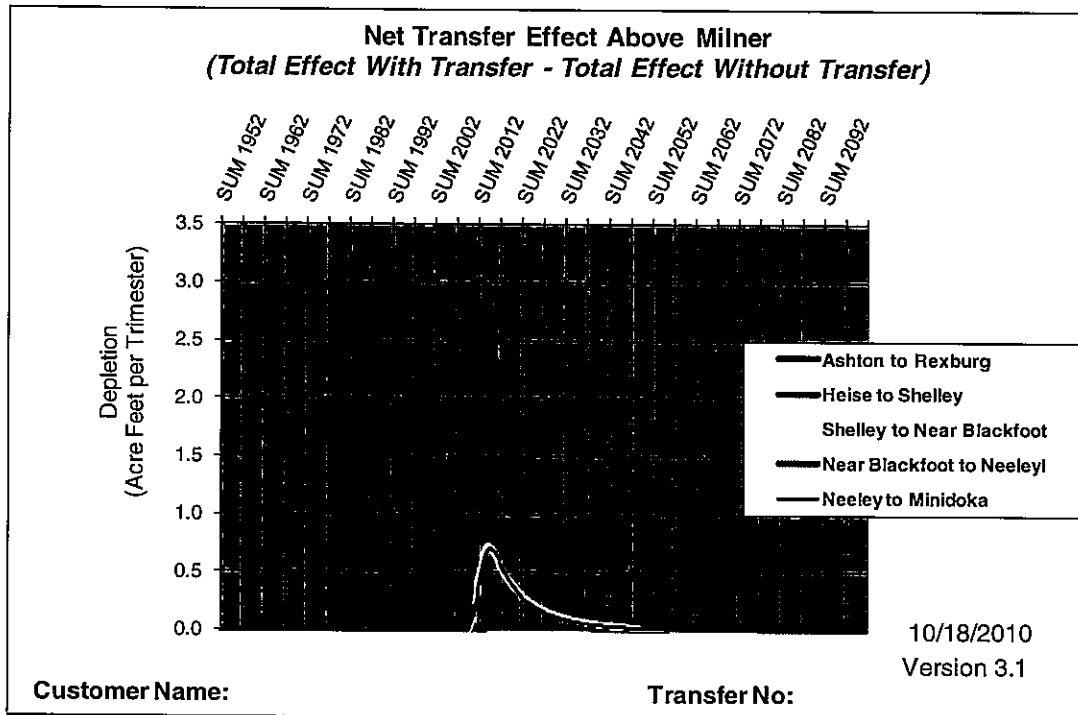
The rental may be approved, as described below:

Water Right No. 36-16702 Diversion Rate: 0.37 cfs Volume: 74.4 acre-feet Rental Fee: \$4,166.40 total for 4 years (\$1,041.60 per year)	Water Right No. 36-16178 Diversion Rate: 0.26 cfs Volume: 52 acre-feet Rental Fee: \$2,912 total for 4 years (\$728 per year)
Water Right No. 36-16148 Diversion Rate: 0.05 cfs Volume: 14.4 acre-feet Rental Fee: \$806.40 total for 4 years (\$201.60 per year)	Combined Diversion Rate: 0.68 cfs Combined Volume: 140.8 acre-feet Combined Acres: 35.2 acres Combined 4-year Rental Fee: \$7,884.80 Season of Use: 3/15 to 11/15 Rental Period: April 15, 2010 to November 15, 2013

Mitigation Criteria

1. During the rental (transitional) period, at any time step are there reaches that are depleted by more than 2 af/acre?

YES. The maximum increase in depletion to the Snake River during the period of interest is expected to occur in the "Near Blackfoot to Neeley" reach at an estimated 2.8 acre-feet during the winter trimester of 2013.



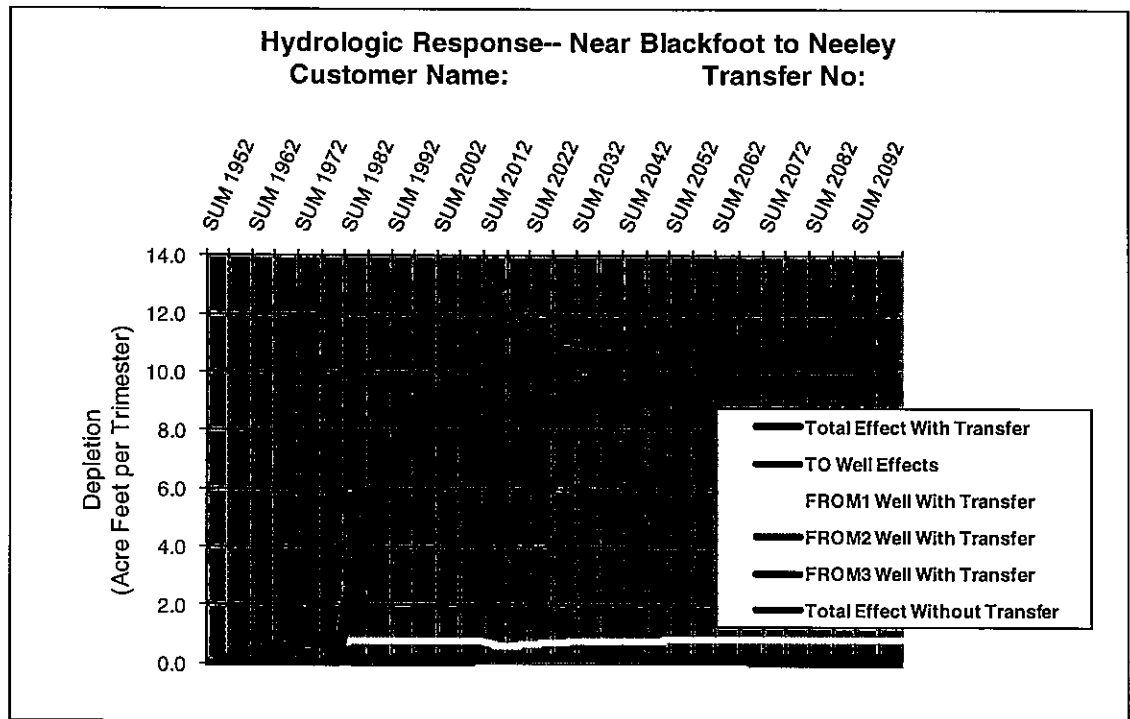
Net Transfer Effect (AF/trimester)	
Trimester	Near Blackfoot to Neeley
SPR 2010	0.1
SUM 2010	0.3
WIN 2010	0.6
SPR 2011	0.8
SUM 2011	1.1
WIN 2011	1.4
SPR 2012	1.6
SUM 2012	1.9
WIN 2012	2.2
SPR 2013	2.4
SUM 2013	2.6
WIN 2013	2.8

2. During the rental (transitional) period, at any time step is any reach depleted by more than 10% of the total depletion to all reaches?

YES. The total depletions with the transfer reach a maximum during the winter trimester of 2013 with a value of 12.8 acre-feet. The total depletions without the transfer have a value of 10.0 acre-feet during this same trimester.

The check to determine the % increase in depletion is calculated by:

$$(12.8 \text{ acre-feet} / 10.0 \text{ acre-feet}) - 1 = 28\%$$



Based on these results, full mitigation is required by renting, but not using, 2.3 acre-feet per trimester. This works out to 6.9 acre-feet per year for each year of the lease.

TRIMESTER OF ACTIVITY	TO WELL Projected Use AF/TRIMESTER	FROM1 WELL		FROM2 WELL		FROM3 WELL	
		With Transfer AF/TRIMESTER	Without Transfer AF/TRIMESTER	With Transfer AF/TRIMESTER	Without Transfer AF/TRIMESTER	With Transfer AF/TRIMESTER	Without Transfer AF/TRIMESTER
SUM 1952	0	10	10	0	0	0	0
WIN 1952	0	0	0	0	0	0	0
SPR 1953	0	5	5	0	0	0	0
↓	↓	↓	↓	↓	↓	↓	↓
SPR 1978	0	5	5	17	17	0	0
SUM 1978	0	10	10	35	35	0	0
WIN 1978	0	0	0	0	0	0	0
↓	↓	↓	↓	↓	↓	↓	↓
SPR 1981	0	5	5	17	17	25	25
SUM 1981	0	10	10	35	35	50	50
WIN 1981	0	0	0	0	0	0	0
↓	↓	↓	↓	↓	↓	↓	↓
SPR 2010	47	0	5	0	17	0	25
SUM 2010	95	0	10	0	35	0	50
WIN 2010	0	0	0	0	0	0	0
SPR 2011	47	0	5	0	17	0	25
SUM 2011	95	0	10	0	35	0	50
WIN 2011	0	0	0	0	0	0	0
SPR 2012	47	0	5	0	17	0	25
SUM 2012	95	0	10	0	35	0	50
WIN 2012	0	0	0	0	0	0	0
SPR 2013	47	0	5	0	17	0	25
SUM 2013	95	0	10	0	35	0	50
WIN 2013	0	0	0	0	0	0	0