Skinner, Corey

From: Skinner, Corey
Sent: Wednesday, October 14, 2020 3:14 PM
To: 'Terry Scanlan'
Cc: Lori Graves
Subject: RE: Updated ESPA Transfer Tool Analysis for True West Beef

Terry,

This is what we are after. I will place this analysis in the transfer file.

Corey

From: Terry Scanlan [mailto:TScanlan@spfwater.com]
Sent: Wednesday, October 07, 2020 3:04 PM
To: Skinner, Corey <Corey.Skinner@idwr.idaho.gov>
Cc: Lori Graves <LGraves@spfwater.com>
Subject: Updated ESPA Transfer Tool Analysis for True West Beef

Corey –

Attached is an updated analysis. Let me know if this hits the mark.

Thanks for your help.

Terry M. Scanlan, P.E., P.G. | Principal Engineer/Hydrogeologist
SPF Water Engineering, LLC
300 E Mallard Drive, Suite 350 | Boise, ID 83706
p. 208.383.4140 | **f.** 208.383.4156 | **d.** 208.489.2121
e. tscanlan@spfwater.com | **w.** www.spfwater.com

-Revised-

SPF WATER ENGINEERING

RECEIVED
OCT 07 2020
DEPT OF WATER RESOURCES
SOUTHERN REGION

MEMORANDUM

DATE: October 7, 2020

TO: Corey Skinner – IDWR Southern Region Manager

FROM: Terry Scanlan, P.E., P.G.

RE: Revised ETRAN Analysis for Transfer of Irrigation Water Rights 36-2283, 36-14617, 36-2386, 36-2608, and 36-16951 (True West Beef LLC – T84385)

True West Beef proposes a transfer of a portion of water rights 36-2283 and 36-14617, and all of water rights 36-2386, 36-2608, and 36-16951 to create a permissible place of use and to allow any of these rights to be pumped from any of the following three wells:

- A0001645 (NESWSW Section 12, Cell 56:30) - Current POD for 36-2283 and 36-14617
- A0003514 (SWNWSE Section 7, Cell 56:31) - Current POD for 36-2386, 36-2608, and 36-16951
- A0003516 (SWSWNE Section 7, Cell 56:32) - Current POD for 36-2386, 36-2608, and 36-16951

Because the well in the NESWSW Section 12 (cell 56:30) is more than one ESPA model cell distant from the well in the SWSWNE Section 7 (cell 56:32), the ESPA transfer tool was used to determine if mitigation is required. Two alternatives were modeled.

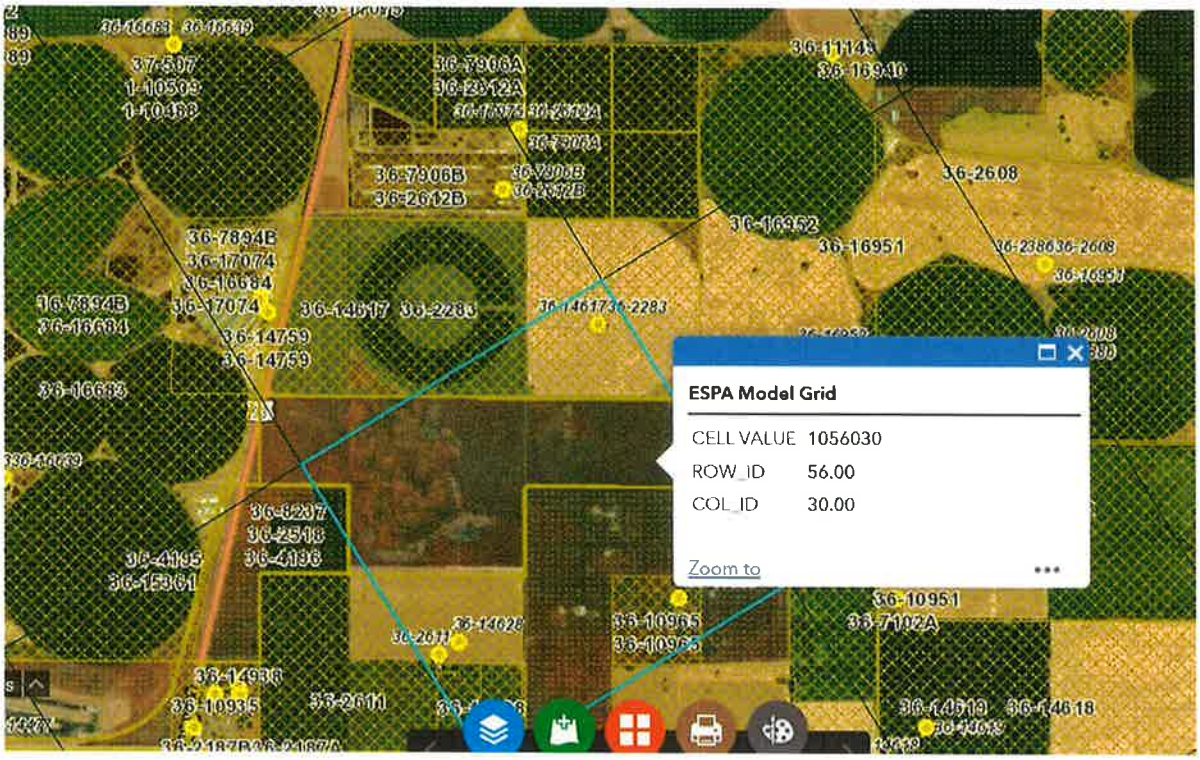
- Alternative 1 assumed all authorized production (2300 af/year) from water rights 36-2386, 36-2608, and 36-16951 was moved west, from cell 56:32 to cell 56:30. This is conservative because the production under these three rights is currently divided between the wells in cell 56:31 and 56:32. We recognize, however, that all production could be from the most distant cell, so we assumed all historical production was from 56:32 to maximize the transfer impact. The analysis assumes a historical consumptive volume of 3 af/ac.

- Alternative 2 assumed all authorized production (454 af/year) from water rights 36-2283, and 36-14617 was moved east, from cell 56:30 to cell 56:32. This is conservative because some of the production under these rights could be moved to the closer a well in cell 56:31. We recognize, however, that all production could be from the most distant cell, so we assumed all production was moved to 56:32 to maximize the transfer impact. As with Alternative 1, Alternative 2 also assumes a historical consumptive volume of 3 af/ac.

The results of both alternatives modeled found that mitigation is not required. Copies of the transfer analysis are attached.

TRANSFER 84385 (26 pgs)

300 E. Mallard Drive, Suite 350, Boise, Idaho 83706 Tel: 208-383-4140 Fax: 208-383-4156


ESPA Model Grid
CELL VALUE 1056030
ROW_ID 56.00
COL_ID 30.00
Zoom to

56-30


(1 of 10)
ESPA Model Grid
CELL VALUE 1056031
ROW_ID 56.00
COL_ID 31.00
Zoom to

56-31


(1 of 11)
ESPA Model Grid
CELL VALUE 1055030
ROW_ID 55.00
COL_ID 30.00
Zoom to

55-30


(1 of 10)
ESPA Model Grid
CELL VALUE 1056032
ROW_ID 56.00
COL_ID 32.00
Zoom to

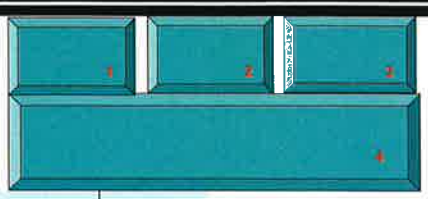
56-32

Alternative 1 – Move 36-2386, 36-2608, and 36-16951
Production West to NESWSW Section 12

ENHANCED GROUND-WATER RIGHTS TRANSFER SPREADSHEET

UNIVERSITY OF IDAHO - IDAHO WATER RESOURCES RESEARCH INSTITUTE — IDAHO DEPARTMENT OF WATER RESOURCES

Cells this color are set up for user entries



ENTER STARTING DATE FOR SIMULATION. THEN PUSH "UPDATE DATES" BUTTON	TRANSFER NO: TBD
YEAR: 1959	TRANSFER NAME:
SEASON: SPRING	TWB (Irrigation)

ENTER CELL LOCATIONS:	'TO' CELL	'FROM1' CELL	'FROM2' CELL	'FROM3' CELL
ROW	56	56		
COLUMN	30	32		

TRIMESTER OF ACTIVITY	TO WELL	FROM1 WELL		FROM2 WELL		FROM3 WELL		
	Projected Use AF/TRIMESTER	With Transfer AF/TRIMESTER	Without Transfer AF/TRIMESTER	With Transfer AF/TRIMESTER	Without Transfer AF/TRIMESTER	With Transfer AF/TRIMESTER	Without Transfer AF/TRIMESTER	
SPR 1959	0	306	306	0	0	0	0	0
SUM 1959	0	306	306	0	0	0	0	0
WIN 1959	0	306	306	0	0	0	0	0
SPR 1960	0	306	306	0	0	0	0	0
SUM 1960	0	306	306	0	0	0	0	0
WIN 1960	0	306	306	0	0	0	0	0
SPR 1961	0	306	306	0	0	0	0	0
SUM 1961	0	306	306	0	0	0	0	0
WIN 1961	0	306	306	0	0	0	0	0
SPR 1962	0	306	306	0	0	0	0	0
SUM 1962	0	306	306	0	0	0	0	0
WIN 1962	0	306	306	0	0	0	0	0
SPR 1963	0	306	306	0	0	0	0	0
SUM 1963	0	306	306	0	0	0	0	0
WIN 1963	0	315	315	0	0	0	0	0
SPR 1964	0	315	315	0	0	0	0	0
SUM 1964	0	315	315	0	0	0	0	0
WIN 1964	0	315	315	0	0	0	0	0
SPR 1965	0	575	575	0	0	0	0	0
SUM 1965	0	575	575	0	0	0	0	0
WIN 1965	0	575	575	0	0	0	0	0
SPR 1966	0	575	575	0	0	0	0	0
SUM 1966	0	575	575	0	0	0	0	0
WIN 1966	0	575	575	0	0	0	0	0
SPR 1967	0	575	575	0	0	0	0	0
SUM 1967	0	575	575	0	0	0	0	0
WIN 1967	0	575	575	0	0	0	0	0
SPR 1968	0	575	575	0	0	0	0	0
SUM 1968	0	575	575	0	0	0	0	0
WIN 1968	0	575	575	0	0	0	0	0
SPR 1969	0	575	575	0	0	0	0	0
SUM 1969	0	575	575	0	0	0	0	0
WIN 1969	0	575	575	0	0	0	0	0
SPR 1970	0	575	575	0	0	0	0	0
SUM 1970	0	575	575	0	0	0	0	0
WIN 1970	0	575	575	0	0	0	0	0
SPR 1971	0	575	575	0	0	0	0	0
SUM 1971	0	575	575	0	0	0	0	0
WIN 1971	0	575	575	0	0	0	0	0
SPR 1972	0	575	575	0	0	0	0	0
SUM 1972	0	575	575	0	0	0	0	0
WIN 1972	0	575	575	0	0	0	0	0
SPR 1973	0	575	575	0	0	0	0	0
SUM 1973	0	575	575	0	0	0	0	0
WIN 1973	0	575	575	0	0	0	0	0
SPR 1974	0	575	575	0	0	0	0	0
SUM 1974	0	575	575	0	0	0	0	0
WIN 1974	0	575	575	0	0	0	0	0
SPR 1975	0	575	575	0	0	0	0	0
SUM 1975	0	575	575	0	0	0	0	0
WIN 1975	0	575	575	0	0	0	0	0
SPR 1976	0	575	575	0	0	0	0	0
SUM 1976	0	575	575	0	0	0	0	0
WIN 1976	0	575	575	0	0	0	0	0
SPR 1977	0	575	575	0	0	0	0	0
SUM 1977	0	575	575	0	0	0	0	0
WIN 1977	0	575	575	0	0	0	0	0
SPR 1978	0	575	575	0	0	0	0	0
SUM 1978	0	575	575	0	0	0	0	0
WIN 1978	0	575	575	0	0	0	0	0
SPR 1979	0	575	575	0	0	0	0	0
SUM 1979	0	575	575	0	0	0	0	0
WIN 1979	0	575	575	0	0	0	0	0
SPR 1980	0	575	575	0	0	0	0	0
SUM 1980	0	575	575	0	0	0	0	0
WIN 1980	0	575	575	0	0	0	0	0
SPR 1981	0	575	575	0	0	0	0	0
SUM 1981	0	575	575	0	0	0	0	0
WIN 1981	0	575	575	0	0	0	0	0
SPR 1982	0	575	575	0	0	0	0	0
SUM 1982	0	575	575	0	0	0	0	0
WIN 1982	0	575	575	0	0	0	0	0
SPR 1983	0	575	575	0	0	0	0	0
SUM 1983	0	575	575	0	0	0	0	0
WIN 1983	0	575	575	0	0	0	0	0
SPR 1984	0	575	575	0	0	0	0	0
SUM 1984	0	575	575	0	0	0	0	0

Entering Dates

Enter the starting year and season for your simulation. The start
of the analysis period. (Spring is Mar, Apr, May and Jun,
Summer is Jul, Aug, Sep and Oct. Winter is Nov, Dec, Jan and F
Once you have entered the starting date, push the "UPDATE DA
The date only needs to be updated once, unless the desired time
Modifying the date does not automatically adjust the location of ll

Entering Well Locations

Enter the row and column location for the 'TO' well in spreadshee
Enter the row and column location for the 'FROM1' well in spreac
Enter the row and column location for the 'FROM2' well in spreac
Enter the row and column location for the 'FROM3' well in spreac
If the 'FROM2' well is not to be modeled, the entered row and col
If the 'FROM3' well is not to be modeled, the entered row and col
The 'FROM3' well cannot be used if the 'FROM2' well is not beinç

Running the Model

Once the model cells have been specified for the 'FROM' and 'TC
the 'RUN MODEL' button to generate the response functions. Th
needs to be re-run if the locations of the 'FROM' and 'TO' wells a

Getting the Model Output

Once the model has been run, push the 'GET OUTPUT' button tc
model output. This prepares the model output for use for calcula

Entering water use data

All water use should be entered in units of acre-feet per four mon
for instructions on multiple water rights with different priority date

Entering 'TO' Well Projected Water Use
Enter the projected water use for the 'TO' Well in Column B. 'TO
should start in the trimester (4-month period) in which the transfe

Entering 'FROM' Well 'With Transfer' Use
Enter the 'With Transfer' water use for the first 'FROM' Well in Cc
the second 'FROM' well in Column E, and for the third 'FROM' W
'With Transfer' water use should reflect historical and projected
should cease or be reduced at the time of the water right transfer.

Entering 'FROM' Well 'Without Transfer' Use
The 'Without Transfer' Use for the 'FROM' wells should include h
The projected use should reflect expected pumpage from that we
Enter the 'Without Transfer' water use for the first 'FROM' Well in
for the second 'FROM' well in Column F, and for the third 'FROM
Prior to the expected date of transfer, the 'With Transfer' use sho

If only one 'FROM' well is to be represented, pumpage in column
If only two 'FROM' wells are being represented, pumpage in Colu
Projected water use in the 'TO' well and the 'FROM' wells will be
effect to the river reaches caused by the water right transfer. (Se

Calculating Effect of the Transfer on River Gains and Losses

After all of the above steps have been completed, the effects of t
of the eleven hydraulically connected reaches of the Snake River
CALCULATE EFFECTS' button. This will result in a multiplicatic
the model runs) times the water use rates entered in the table pr
After the multiplication has been performed, the spreadsheet will
worksheet. Here one graph is provided showing the effect for ea
illustrates the net effects on all 11 reaches. Results are also pres
EFFECTS worksheet. See the Users Manual for more informatic

WIN 1984	0	575	575	0	0	0	0
SPR 1985	0	575	575	0	0	0	0
SUM 1985	0	575	575	0	0	0	0
WIN 1985	0	575	575	0	0	0	0
SPR 1986	0	575	575	0	0	0	0
SUM 1986	0	575	575	0	0	0	0
WIN 1986	0	575	575	0	0	0	0
SPR 1987	0	575	575	0	0	0	0
SUM 1987	0	575	575	0	0	0	0
WIN 1987	0	575	575	0	0	0	0
SPR 1988	0	575	575	0	0	0	0
SUM 1988	0	575	575	0	0	0	0
WIN 1988	0	575	575	0	0	0	0
SPR 1989	0	575	575	0	0	0	0
SUM 1989	0	575	575	0	0	0	0
WIN 1989	0	575	575	0	0	0	0
SPR 1990	0	575	575	0	0	0	0
SUM 1990	0	575	575	0	0	0	0
WIN 1990	0	575	575	0	0	0	0
SPR 1991	0	575	575	0	0	0	0
SUM 1991	0	575	575	0	0	0	0
WIN 1991	0	575	575	0	0	0	0
SPR 1992	0	575	575	0	0	0	0
SUM 1992	0	575	575	0	0	0	0
WIN 1992	0	575	575	0	0	0	0
SPR 1993	0	575	575	0	0	0	0
SUM 1993	0	575	575	0	0	0	0
WIN 1993	0	575	575	0	0	0	0
SPR 1994	0	575	575	0	0	0	0
SUM 1994	0	575	575	0	0	0	0
WIN 1994	0	575	575	0	0	0	0
SPR 1995	0	575	575	0	0	0	0
SUM 1995	0	575	575	0	0	0	0
WIN 1995	0	575	575	0	0	0	0
SPR 1996	0	575	575	0	0	0	0
SUM 1996	0	575	575	0	0	0	0
WIN 1996	0	575	575	0	0	0	0
SPR 1997	0	575	575	0	0	0	0
SUM 1997	0	575	575	0	0	0	0
WIN 1997	0	575	575	0	0	0	0
SPR 1998	0	575	575	0	0	0	0
SUM 1998	0	575	575	0	0	0	0
WIN 1998	0	575	575	0	0	0	0
SPR 1999	0	575	575	0	0	0	0
SUM 1999	0	575	575	0	0	0	0
WIN 1999	0	575	575	0	0	0	0
SPR 2000	0	575	575	0	0	0	0
SUM 2000	0	575	575	0	0	0	0
WIN 2000	0	575	575	0	0	0	0
SPR 2001	0	575	575	0	0	0	0
SUM 2001	0	575	575	0	0	0	0
WIN 2001	0	575	575	0	0	0	0
SPR 2002	0	575	575	0	0	0	0
SUM 2002	0	575	575	0	0	0	0
WIN 2002	0	575	575	0	0	0	0
SPR 2003	0	575	575	0	0	0	0
SUM 2003	0	575	575	0	0	0	0
WIN 2003	0	575	575	0	0	0	0
SPR 2004	0	575	575	0	0	0	0
SUM 2004	0	575	575	0	0	0	0
WIN 2004	0	575	575	0	0	0	0
SPR 2005	0	575	575	0	0	0	0
SUM 2005	0	575	575	0	0	0	0
WIN 2005	0	575	575	0	0	0	0
SPR 2006	0	575	575	0	0	0	0
SUM 2006	0	575	575	0	0	0	0
WIN 2006	0	575	575	0	0	0	0
SPR 2007	0	575	575	0	0	0	0
SUM 2007	0	575	575	0	0	0	0
WIN 2007	0	575	575	0	0	0	0
SPR 2008	0	575	575	0	0	0	0
SUM 2008	0	575	575	0	0	0	0
WIN 2008	0	575	575	0	0	0	0
SPR 2009	0	575	575	0	0	0	0
SUM 2009	0	575	575	0	0	0	0
WIN 2009	0	575	575	0	0	0	0
SPR 2010	0	575	575	0	0	0	0
SUM 2010	0	575	575	0	0	0	0
WIN 2010	0	575	575	0	0	0	0
SPR 2011	0	575	575	0	0	0	0
SUM 2011	0	575	575	0	0	0	0
WIN 2011	0	575	575	0	0	0	0
SPR 2012	0	575	575	0	0	0	0
SUM 2012	0	575	575	0	0	0	0
WIN 2012	0	575	575	0	0	0	0
SPR 2013	0	575	575	0	0	0	0
SUM 2013	0	575	575	0	0	0	0
WIN 2013	0	575	575	0	0	0	0
SPR 2014	0	575	575	0	0	0	0
SUM 2014	0	575	575	0	0	0	0
WIN 2014	0	575	575	0	0	0	0
SPR 2015	0	575	575	0	0	0	0
SUM 2015	0	575	575	0	0	0	0
WIN 2015	0	575	575	0	0	0	0
SPR 2016	0	575	575	0	0	0	0
SUM 2016	0	575	575	0	0	0	0
WIN 2016	0	575	575	0	0	0	0
SPR 2017	0	575	575	0	0	0	0
SUM 2017	0	575	575	0	0	0	0
WIN 2017	0	575	575	0	0	0	0
SPR 2018	0	575	575	0	0	0	0
SUM 2018	0	575	575	0	0	0	0
WIN 2018	0	575	575	0	0	0	0
SPR 2019	0	575	575	0	0	0	0
SUM 2019	0	575	575	0	0	0	0
WIN 2019	0	575	575	0	0	0	0
SPR 2020	0	575	575	0	0	0	0
SUM 2020	0	575	575	0	0	0	0
WIN 2020	0	575	575	0	0	0	0
SPR 2021	575	0	575	0	0	0	0
SUM 2021	575	0	575	0	0	0	0
WIN 2021	575	0	575	0	0	0	0

SPR 2022	575	0	575	0	0	0	0
SUM 2022	575	0	575	0	0	0	0
WIN 2022	575	0	575	0	0	0	0
SPR 2023	575	0	575	0	0	0	0
SUM 2023	575	0	575	0	0	0	0
WIN 2023	575	0	575	0	0	0	0
SPR 2024	575	0	575	0	0	0	0
SUM 2024	575	0	575	0	0	0	0
WIN 2024	575	0	575	0	0	0	0
SPR 2025	575	0	575	0	0	0	0
SUM 2025	575	0	575	0	0	0	0
WIN 2025	575	0	575	0	0	0	0
SPR 2026	575	0	575	0	0	0	0
SUM 2026	575	0	575	0	0	0	0
WIN 2026	575	0	575	0	0	0	0
SPR 2027	575	0	575	0	0	0	0
SUM 2027	575	0	575	0	0	0	0
WIN 2027	575	0	575	0	0	0	0
SPR 2028	575	0	575	0	0	0	0
SUM 2028	575	0	575	0	0	0	0
WIN 2028	575	0	575	0	0	0	0
SPR 2029	575	0	575	0	0	0	0
SUM 2029	575	0	575	0	0	0	0
WIN 2029	575	0	575	0	0	0	0
SPR 2030	575	0	575	0	0	0	0
SUM 2030	575	0	575	0	0	0	0
WIN 2030	575	0	575	0	0	0	0
SPR 2031	575	0	575	0	0	0	0
SUM 2031	575	0	575	0	0	0	0
WIN 2031	575	0	575	0	0	0	0
SPR 2032	575	0	575	0	0	0	0
SUM 2032	575	0	575	0	0	0	0
WIN 2032	575	0	575	0	0	0	0
SPR 2033	575	0	575	0	0	0	0
SUM 2033	575	0	575	0	0	0	0
WIN 2033	575	0	575	0	0	0	0
SPR 2034	575	0	575	0	0	0	0
SUM 2034	575	0	575	0	0	0	0
WIN 2034	575	0	575	0	0	0	0
SPR 2035	575	0	575	0	0	0	0
SUM 2035	575	0	575	0	0	0	0
WIN 2035	575	0	575	0	0	0	0
SPR 2036	575	0	575	0	0	0	0
SUM 2036	575	0	575	0	0	0	0
WIN 2036	575	0	575	0	0	0	0
SPR 2037	575	0	575	0	0	0	0
SUM 2037	575	0	575	0	0	0	0
WIN 2037	575	0	575	0	0	0	0
SPR 2038	575	0	575	0	0	0	0
SUM 2038	575	0	575	0	0	0	0
WIN 2038	575	0	575	0	0	0	0
SPR 2039	575	0	575	0	0	0	0
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WIN 2039	575	0	575	0	0	0	0
SPR 2040	575	0	575	0	0	0	0
SUM 2040	575	0	575	0	0	0	0
WIN 2040	575	0	575	0	0	0	0
SPR 2041	575	0	575	0	0	0	0
SUM 2041	575	0	575	0	0	0	0
WIN 2041	575	0	575	0	0	0	0
SPR 2042	575	0	575	0	0	0	0
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WIN 2042	575	0	575	0	0	0	0
SPR 2043	575	0	575	0	0	0	0
SUM 2043	575	0	575	0	0	0	0
WIN 2043	575	0	575	0	0	0	0
SPR 2044	575	0	575	0	0	0	0
SUM 2044	575	0	575	0	0	0	0
WIN 2044	575	0	575	0	0	0	0
SPR 2045	575	0	575	0	0	0	0
SUM 2045	575	0	575	0	0	0	0
WIN 2045	575	0	575	0	0	0	0
SPR 2046	575	0	575	0	0	0	0
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WIN 2046	575	0	575	0	0	0	0
SPR 2047	575	0	575	0	0	0	0
SUM 2047	575	0	575	0	0	0	0
WIN 2047	575	0	575	0	0	0	0
SPR 2048	575	0	575	0	0	0	0
SUM 2048	575	0	575	0	0	0	0
WIN 2048	575	0	575	0	0	0	0
SPR 2049	575	0	575	0	0	0	0
SUM 2049	575	0	575	0	0	0	0
WIN 2049	575	0	575	0	0	0	0
SPR 2050	575	0	575	0	0	0	0
SUM 2050	575	0	575	0	0	0	0
WIN 2050	575	0	575	0	0	0	0
SPR 2051	575	0	575	0	0	0	0
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WIN 2051	575	0	575	0	0	0	0
SPR 2052	575	0	575	0	0	0	0
SUM 2052	575	0	575	0	0	0	0
WIN 2052	575	0	575	0	0	0	0
SPR 2053	575	0	575	0	0	0	0
SUM 2053	575	0	575	0	0	0	0
WIN 2053	575	0	575	0	0	0	0
SPR 2054	575	0	575	0	0	0	0
SUM 2054	575	0	575	0	0	0	0
WIN 2054	575	0	575	0	0	0	0
SPR 2055	575	0	575	0	0	0	0
SUM 2055	575	0	575	0	0	0	0
WIN 2055	575	0	575	0	0	0	0
SPR 2056	575	0	575	0	0	0	0
SUM 2056	575	0	575	0	0	0	0
WIN 2056	575	0	575	0	0	0	0
SPR 2057	575	0	575	0	0	0	0
SUM 2057	575	0	575	0	0	0	0
WIN 2057	575	0	575	0	0	0	0
SPR 2058	575	0	575	0	0	0	0
SUM 2058	575	0	575	0	0	0	0
WIN 2058	575	0	575	0	0	0	0
SPR 2059	575	0	575	0	0	0	0

SUM 2059	575	0	575	0	0	0	0
WIN 2059	575	0	575	0	0	0	0
SPR 2060	575	0	575	0	0	0	0
SUM 2060	575	0	575	0	0	0	0
WIN 2060	575	0	575	0	0	0	0
SPR 2061	575	0	575	0	0	0	0
SUM 2061	575	0	575	0	0	0	0
WIN 2061	575	0	575	0	0	0	0
SPR 2062	575	0	575	0	0	0	0
SUM 2062	575	0	575	0	0	0	0
WIN 2062	575	0	575	0	0	0	0
SPR 2063	575	0	575	0	0	0	0
SUM 2063	575	0	575	0	0	0	0
WIN 2063	575	0	575	0	0	0	0
SPR 2064	575	0	575	0	0	0	0
SUM 2064	575	0	575	0	0	0	0
WIN 2064	575	0	575	0	0	0	0
SPR 2065	575	0	575	0	0	0	0
SUM 2065	575	0	575	0	0	0	0
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SPR 2066	575	0	575	0	0	0	0
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WIN 2066	575	0	575	0	0	0	0
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SPR 2068	575	0	575	0	0	0	0
SUM 2068	575	0	575	0	0	0	0
WIN 2068	575	0	575	0	0	0	0
SPR 2069	575	0	575	0	0	0	0
SUM 2069	575	0	575	0	0	0	0
WIN 2069	575	0	575	0	0	0	0
SPR 2070	575	0	575	0	0	0	0
SUM 2070	575	0	575	0	0	0	0
WIN 2070	575	0	575	0	0	0	0
SPR 2071	575	0	575	0	0	0	0
SUM 2071	575	0	575	0	0	0	0
WIN 2071	575	0	575	0	0	0	0
SPR 2072	575	0	575	0	0	0	0
SUM 2072	575	0	575	0	0	0	0
WIN 2072	575	0	575	0	0	0	0
SPR 2073	575	0	575	0	0	0	0
SUM 2073	575	0	575	0	0	0	0
WIN 2073	575	0	575	0	0	0	0
SPR 2074	575	0	575	0	0	0	0
SUM 2074	575	0	575	0	0	0	0
WIN 2074	575	0	575	0	0	0	0
SPR 2075	575	0	575	0	0	0	0
SUM 2075	575	0	575	0	0	0	0
WIN 2075	575	0	575	0	0	0	0
SPR 2076	575	0	575	0	0	0	0
SUM 2076	575	0	575	0	0	0	0
WIN 2076	575	0	575	0	0	0	0
SPR 2077	575	0	575	0	0	0	0
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SPR 2089	575	0	575	0	0	0	0
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SPR 2091	575	0	575	0	0	0	0
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WIN 2091	575	0	575	0	0	0	0
SPR 2092	575	0	575	0	0	0	0
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WIN 2092	575	0	575	0	0	0	0
SPR 2093	575	0	575	0	0	0	0
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WIN 2093	575	0	575	0	0	0	0
SPR 2094	575	0	575	0	0	0	0
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WIN 2094	575	0	575	0	0	0	0
SPR 2095	575	0	575	0	0	0	0
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WIN 2095	575	0	575	0	0	0	0
SPR 2096	575	0	575	0	0	0	0
SUM 2096	575	0	575	0	0	0	0

WIN 2096	575	0	575	0	0	0	0
SPR 2097	575	0	575	0	0	0	0
SUM 2097	575	0	575	0	0	0	0
WIN 2097	575	0	575	0	0	0	0
SPR 2098	575	0	575	0	0	0	0
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WIN 2099	575	0	575	0	0	0	0
SPR 2100	575	0	575	0	0	0	0
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WIN 2100	575	0	575	0	0	0	0
SPR 2101	575	0	575	0	0	0	0
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WIN 2101	575	0	575	0	0	0	0
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WIN 2103	575	0	575	0	0	0	0
SPR 2104	575	0	575	0	0	0	0
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WIN 2104	575	0	575	0	0	0	0
SPR 2105	575	0	575	0	0	0	0
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WIN 2107	575	0	575	0	0	0	0
SPR 2108	575	0	575	0	0	0	0
SUM 2108	575	0	575	0	0	0	0
WIN 2108	575	0	575	0	0	0	0

ESPA Ground Water Rights Transfer Spreadsheet Data Summary

TRANSFER NO: TBD
TRANSFER NAME: TWB (Irrigation)

PREPARED BY: Terry Scanlan
DATE: 10/7/2020
Transfer Tool Version Version 3.2

BLUE CELLS ARE SET UP FOR USER ENTRIES

WATER RIGHTS INVOLVED:

Group 1 Transfer Rights		Group 2 Additional Mitigation Rights	
Right No.	Priority Date	Right No.	Priority Date
36-2386	5/14/1959		
36-16951	9/26/1963		
36-2608	2/8/1965		

HISTORIC BENEFICIAL USE:

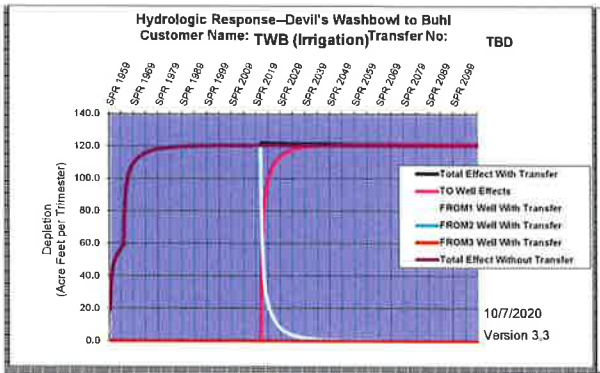
Trans/Mit. Rights (group no.)	Acres to Dry Up (ac)	Beneficial Use (afa/yr)	Total (af/yr)
	306	918	918
	9.2	27.6	27.6
	260	780	780

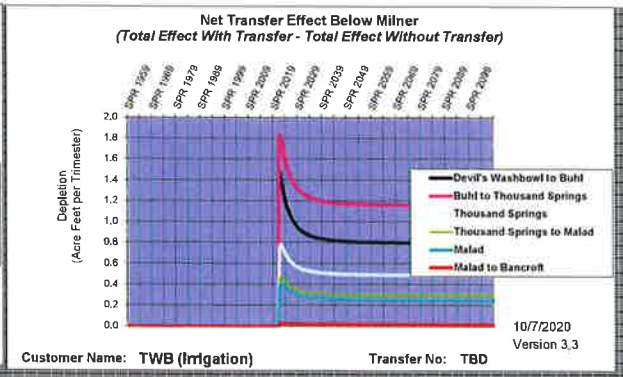
MITIGATION NOTES:

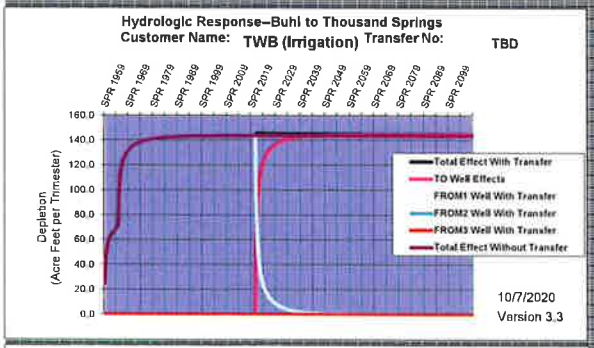
MODEL CELL LOCATIONS:

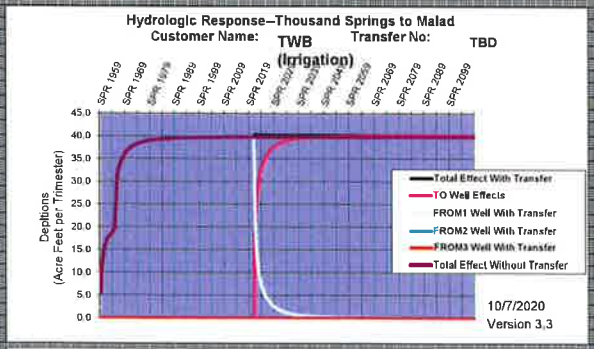
	TO WELL	FROM1 WELL	FROM2 WELL	FROM3 WELL
ROW	56	56	0	0
COLUMN	30	32	0	0

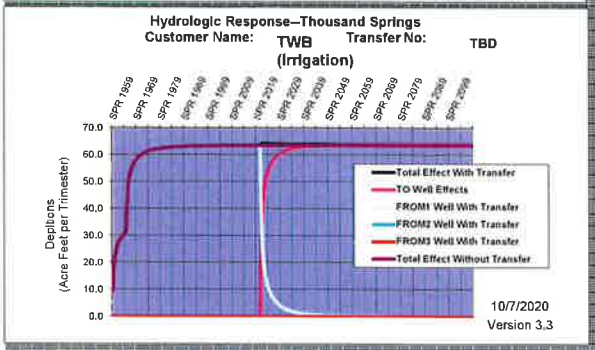
	Start Date		End Date		Water Use		Acres	
	Season	Year	Season	Year	Annual (af/yr)	Trimester (af/trimester)	Authorized (acres)	Notes
TO Well (Projected Use)	Spring	2021	Winter	2170	1725.6	575.2	575.2	
FROM1 Well (With Transfer)	Spring	1959	Summer	1963	0	0.0	306.0	
	Winter	1963	Winter	1964	945.6	315.2	315.2	
	Spring	1965	Winter	2020	1725.6	575.2	575.2	
	Spring	2021	Winter	2170	0	0.0	0.0	
FROM1 Well (Without Transfer)	Spring	1959	Summer	1963	0	0.0	306.0	
	Winter	1963	Winter	1964	945.6	315.2	315.2	
	Spring	1965	Winter	2170	1725.6	575.2	575.2	
FROM2 Well (With Transfer)								
FROM2 Well (Without Transfer)								
FROM3 Well (With Transfer)								
FROM3 Well (Without Transfer)								

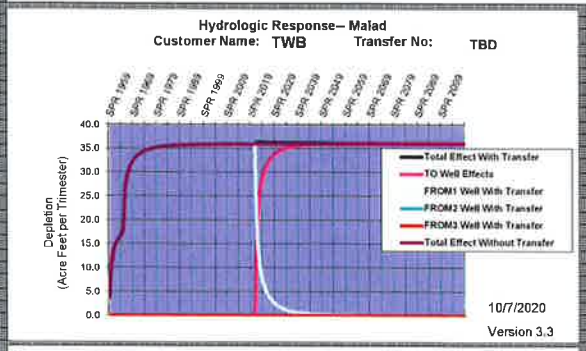

Hydrologic Response--Devil's Washbowl to Buhl
Customer Name: TWB (Irrigation) Transfer No: TBD
Depletion (Acre Feet per Trimester)
Total Effect With Transfer
TO Well Effects
FROM1 Well With Transfer
FROM2 Well With Transfer
FROM3 Well With Transfer
Total Effect Without Transfer
10/7/2020
Version 3.3

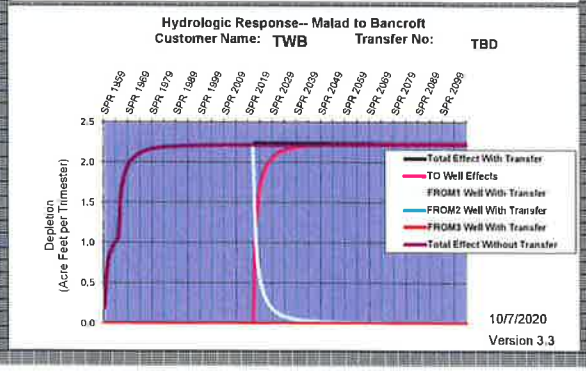

Net Transfer Effect Below Milner
(Total Effect With Transfer - Total Effect Without Transfer)
Depletion (Acre Feet per Trimester)
Devil's Washbowl to Buhl
Buhl to Thousand Springs
Thousand Springs
Thousand Springs to Malad
Malad
Malad to Bancroft
10/7/2020
Version 3.3
Customer Name: TWB (Irrigation)
Transfer No: TBD

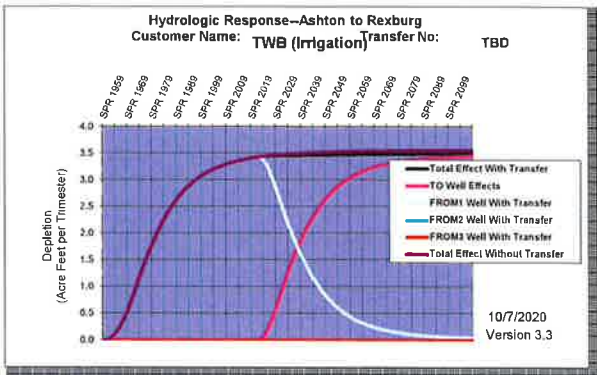

Hydrologic Response--Buhl to Thousand Springs
Customer Name: TWB (Irrigation) Transfer No: TBD
Depletion (Acre Feet per Trimester)
Total Effect With Transfer
TO Well Effects
FROM1 Well With Transfer
FROM2 Well With Transfer
FROM3 Well With Transfer
Total Effect Without Transfer
10/7/2020
Version 3.3

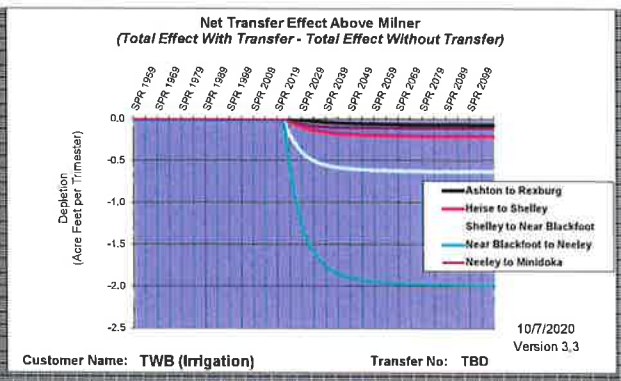

Hydrologic Response--Thousand Springs to Malad
Customer Name: TWB (Irrigation) Transfer No: TBD
Depletion (Acre Feet per Trimester)
Total Effect With Transfer
TO Well Effects
FROM1 Well With Transfer
FROM2 Well With Transfer
FROM3 Well With Transfer
Total Effect Without Transfer
10/7/2020
Version 3.3

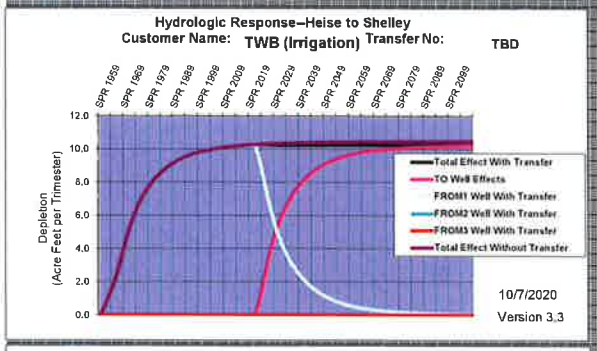

Hydrologic Response--Thousand Springs
Customer Name: TWB (Irrigation) Transfer No: TBD
Depletion (Acre Feet per Trimester)
Total Effect With Transfer
TO Well Effects
FROM1 Well With Transfer
FROM2 Well With Transfer
FROM3 Well With Transfer
Total Effect Without Transfer
10/7/2020
Version 3.3

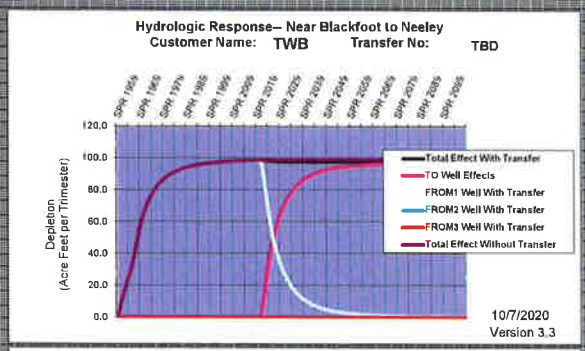

Hydrologic Response-- Malad
Customer Name: TWB Transfer No: TBD
Depletion (Acre Feet per Trimester)
Total Effect With Transfer
TO Well Effects
FROM1 Well With Transfer
FROM2 Well With Transfer
FROM3 Well With Transfer
Total Effect Without Transfer
10/7/2020
Version 3.3

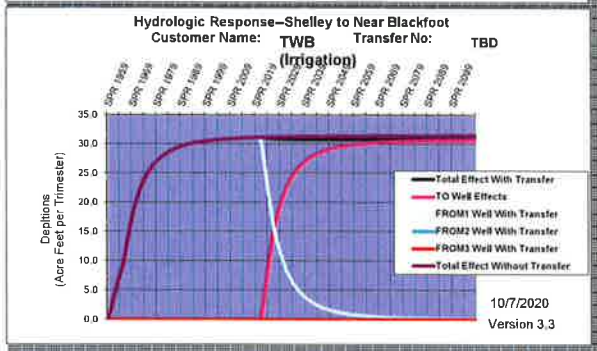

Hydrologic Response-- Malad to Bancroft
Customer Name: TWB Transfer No: TBD
Depletion (Acre Feet per Trimester)
Total Effect With Transfer
TO Well Effects
FROM1 Well With Transfer
FROM2 Well With Transfer
FROM3 Well With Transfer
Total Effect Without Transfer
10/7/2020
Version 3.3

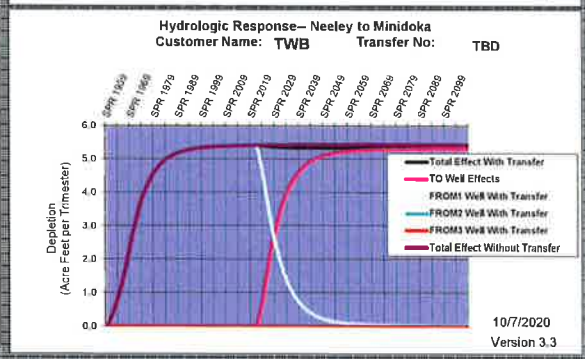

Hydrologic Response--Ashton to Rexburg
Customer Name: TWB (Irrigation) Transfer No: TBD
Depletion (Acre Feet per Trimester)
Total Effect With Transfer
TO Well Effects
FROM1 Well With Transfer
FROM2 Well With Transfer
FROM3 Well With Transfer
Total Effect Without Transfer
10/7/2020
Version 3.3


Net Transfer Effect Above Milner
(Total Effect With Transfer - Total Effect Without Transfer)
Depletion (Acre Feet per Trimester)
Ashton to Rexburg
Heise to Shelley
Shelley to Near Blackfoot
Near Blackfoot to Neeley
Neeley to Minidoka
10/7/2020
Version 3.3
Customer Name: TWB (Irrigation)
Transfer No: TBD

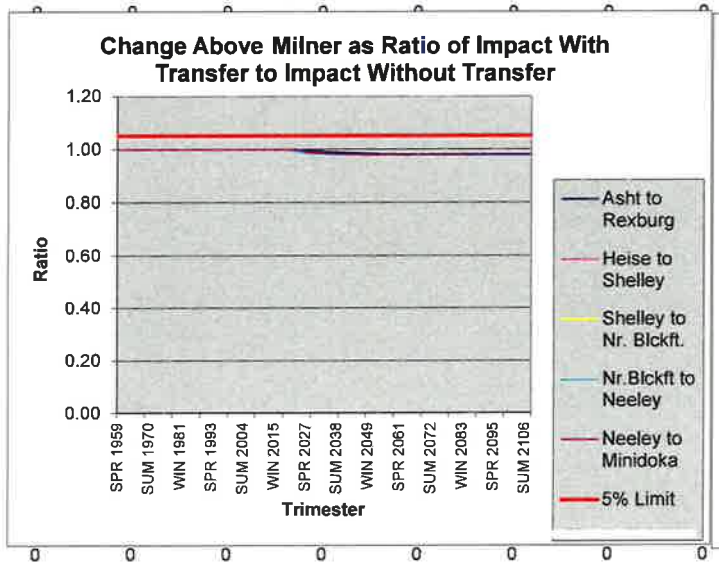

Hydrologic Response--Heise to Shelley
Customer Name: TWB (Irrigation) Transfer No: TBD
Depletion (Acre Feet per Trimester)
Total Effect With Transfer
TO Well Effects
FROM1 Well With Transfer
FROM2 Well With Transfer
FROM3 Well With Transfer
Total Effect Without Transfer
10/7/2020
Version 3.3

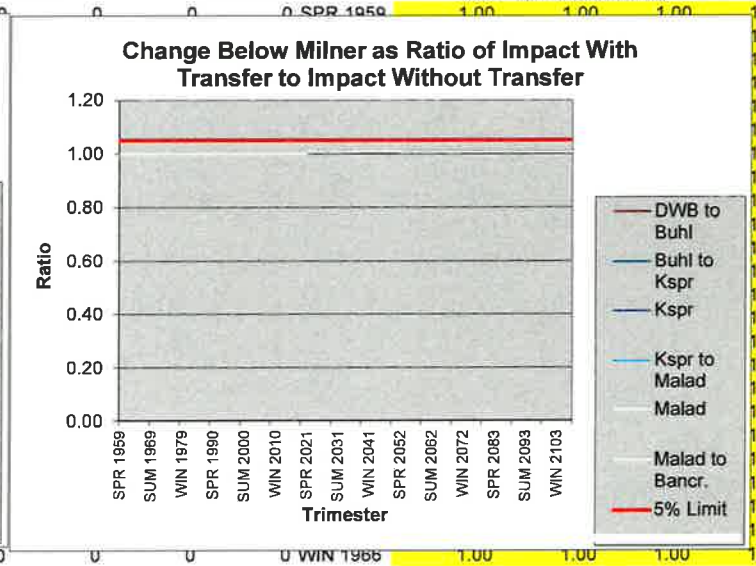

Hydrologic Response-- Near Blackfoot to Neeley
Customer Name: TWB Transfer No: TBD
Depletion (Acre Feet per Trimester)
Total Effect With Transfer
TO Well Effects
FROM1 Well With Transfer
FROM2 Well With Transfer
FROM3 Well With Transfer
Total Effect Without Transfer
10/7/2020
Version 3.3


Hydrologic Response--Shelley to Near Blackfoot
Customer Name: TWB (Irrigation) Transfer No: TBD
Depletions (Acre Feet per Trimester)
Total Effect With Transfer
TO Well Effects
FROM1 Well With Transfer
FROM2 Well With Transfer
FROM3 Well With Transfer
Total Effect Without Transfer
10/7/2020
Version 3.3


Hydrologic Response-- Neeley to Minidoka
Customer Name: TWB Transfer No: TBD
Depletion (Acre Feet per Trimester)
Total Effect With Transfer
TO Well Effects
FROM1 Well With Transfer
FROM2 Well With Transfer
FROM3 Well With Transfer
Total Effect Without Transfer
10/7/2020
Version 3.3

period	Rexburg	Shelley	Nr Blckft	Neeley	Minidoka	Buhl	Kspr	Malad	Bancroft	period	Asht to Rex	Heise to Sh	Shelley to	Nr.Blckft to	Neeley to I
SPR 1959	0	0	0	0	0	0	0	0	0	SPR 1959	1.00	1.00	1.00	1.00	1.00
SUM 1959														1.00	1.00
WIN 1959														1.00	1.00
SPR 1960														1.00	1.00
SUM 1960														1.00	1.00
WIN 1960														1.00	1.00
SPR 1961														1.00	1.00
SUM 1961														1.00	1.00
WIN 1961														1.00	1.00
SPR 1962														1.00	1.00
SUM 1962														1.00	1.00
WIN 1962														1.00	1.00
SPR 1963														1.00	1.00
SUM 1963														1.00	1.00
WIN 1963														1.00	1.00
SPR 1964														1.00	1.00
SUM 1964														1.00	1.00
WIN 1964														1.00	1.00
SPR 1965														1.00	1.00
SUM 1965														1.00	1.00
WIN 1965														1.00	1.00
SPR 1966														1.00	1.00
SUM 1966														1.00	1.00
WIN 1966	0	0	0	0	0	0	0	0	0	WIN 1966	1.00	1.00	1.00	1.00	1.00





Enter First Time Step of Transfer: SPR 2021

Match: 187 Match: 456

	AtR	HtS	StNB	NBtN	NtM	DWtB	BtTS	TS	TStM	M	MtB	Total	
Preexisting Effects @ SS (Last Time Step):	3.57	10.48	31.44	99.66	5.44	120.90	144.08	63.53	39.90	35.98	2.22	557.20	Total Effects without Transfer - Last Timestep
Steady State - Value of Dep. @ Last Time Step:	3.50	10.28	30.82	97.68	5.33	121.70	145.23	64.03	40.20	36.24	2.23	557.23	Total Effects with Transfer - Last Time Step
Preexisting Effects @ Transient State (Max Value Timestep):	3.57	10.48	31.44	99.66	5.44	120.90	144.08	63.53	39.90	35.98	2.22	557.20	Total Effects without Transfer - Correlates to Max Value from Total Effects with Transfer
Transient State - Max. Value of Dep. After Transfer:	3.50	10.29	31.12	98.69	5.41	122.25	145.76	64.25	40.33	36.35	2.24	560.19	Total Effects with Transfer - Max Value from Start of Transfer to Last Time Step
Steady State Change:	-0.07	-0.21	-0.62	-1.98	-0.11	0.80	1.16	0.49	0.30	0.26	0.02		
Transient State Change:	-0.07	-0.20	-0.32	-0.97	-0.03	1.35	1.69	0.71	0.44	0.37	0.02		

Mitigation Analysis Period

Trimester

One-Way Analysis of Independent Transfers

Irrigation Transfer1 TWB

WR No.	Div. Rate (CFS)	Con. Vol. (AFA)	No. of Irr. Acres	Priority Date	POD Location	Dedicated Vol. AFA/ AFT		Model Node
Transfer 1: Proposed Steady State Impacts following Transfer								
???	???	0.0	0.0	1/1/1960	0	0	0.0	0
???	???	0	0	1/1/1960	0	0	0.0	0
Transfer 1: Worst Case Transient State Impacts following Transfer								
???	???	0	0	1/1/1960	0	0	0.0	0
???	???	0	0	1/1/1960	0	0	0.0	0

Impact by Reach (AF/Trimester)

Ashton to Rexburg	Heise to Shelley	Shelley to Nr Blckft	Nr Blckft To Neeley	Neeley to Minidoka	Dev. Wbl. To Buhl	Buhl to Kspr	Kspr	Kspr to Malad	Malad	Malad to Bancroft
3.57	10.48	31.44	99.66	5.44	120.90	144.08	63.53	39.90	35.98	2.22
3.50	10.28	30.82	97.68	5.33	121.70	145.23	64.03	40.20	36.24	2.23
3.57	10.48	31.44	99.66	5.44	120.90	144.08	63.53	39.90	35.98	2.22
3.50	10.29	31.12	98.69	5.41	122.25	145.76	64.25	40.33	36.35	2.24

Steady State Analysis	Mitigation Check 1 - >10% of Historical:	-2.0%	-2.0%	-2.0%	-2.0%	-2.0%	0.7%	0.8%	0.8%	0.8%	0.7%	0.7%
	Mitigation Check 2: > 2 AF/T:	-0.1	-0.2	-0.6	-2.0	-0.1	0.8	1.2	0.5	0.3	0.3	0.0
	Mitigation Check 3 - >10% of Total:	0.6%	1.8%	5.5%	17.5%	1.0%	21.8%	26.1%	11.5%	7.2%	6.5%	0.4%
	Mitigation Required?:	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
	Mitigation Vol. Req'd (ac-ft):	-0.1	-0.2	-0.6	-2.0	-0.1	0.8	1.2	0.5	0.3	0.3	0.0
Transient State Analysis	Mitigation Check 1 - >10% of Historical:	-2.0%	-1.9%	-1.0%	-1.0%	-0.6%	1.1%	1.2%	1.1%	1.1%	1.0%	1.0%
	Mitigation Check 2: > 2.01 AF/T:	-0.1	-0.2	-0.3	-1.0	0.0	1.3	1.7	0.7	0.4	0.4	0.0
	Mitigation Required?:	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
	Mitigation Vol. Req'd (ac-ft):	-0.1	-0.2	-0.3	-1.0	0.0	1.3	1.7	0.7	0.4	0.4	0.0

Read Me

Alternative 2 – Move 36-36-2283 and 36-14617 Production East to SWSWNE Section 7

ENHANCED GROUND-WATER RIGHTS TRANSFER SPREADSHEET

UNIVERSITY OF IDAHO - IDAHO WATER RESOURCES RESEARCH INSTITUTE IDAHO DEPARTMENT OF WATER RESOURCES

Cells this color are set up for user entries

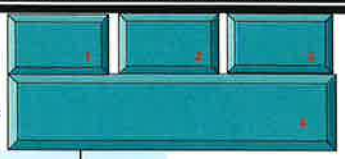
ENTER STARTING DATE FOR SIMULATION. THEN PUSH "UPDATE DATES" BUTTON

YEAR: 1959

SEASON: SPRING

TRANSFER NO: TBD

TRANSFER NAME: TWB (Irrigation)



ENTER CELL LOCATIONS:

	'TO' CELL	'FROM1' CELL	'FROM2' CELL	'FROM3' CELL
ROW	56	56		
COLUMN	32	30		

TRIMESTER OF ACTIVITY	TO WELL Projected Use AF/TRIMESTER	FROM1 WELL With Transfer AF/TRIMESTER	FROM1 WELL Without Transfer AF/TRIMESTER	FROM2 WELL With Transfer AF/TRIMESTER	FROM2 WELL Without Transfer AF/TRIMESTER	FROM3 WELL With Transfer AF/TRIMESTER	FROM3 WELL Without Transfer AF/TRIMESTER
SPR 1959	0	93	93	0	0	0	0
SUM 1959	0	93	93	0	0	0	0
WIN 1959	0	93	93	0	0	0	0
SPR 1960	0	93	93	0	0	0	0
SUM 1960	0	93	93	0	0	0	0
WIN 1960	0	93	93	0	0	0	0
SPR 1961	0	93	93	0	0	0	0
SUM 1961	0	93	93	0	0	0	0
WIN 1961	0	93	93	0	0	0	0
SPR 1962	0	93	93	0	0	0	0
SUM 1962	0	93	93	0	0	0	0
WIN 1962	0	93	93	0	0	0	0
SPR 1963	0	93	93	0	0	0	0
SUM 1963	0	93	93	0	0	0	0
WIN 1963	0	93	93	0	0	0	0
SPR 1964	0	93	93	0	0	0	0
SUM 1964	0	93	93	0	0	0	0
WIN 1964	0	93	93	0	0	0	0
SPR 1965	0	93	93	0	0	0	0
SUM 1965	0	93	93	0	0	0	0
WIN 1965	0	93	93	0	0	0	0
SPR 1966	0	93	93	0	0	0	0
SUM 1966	0	93	93	0	0	0	0
WIN 1966	0	93	93	0	0	0	0
SPR 1967	0	93	93	0	0	0	0
SUM 1967	0	93	93	0	0	0	0
WIN 1967	0	93	93	0	0	0	0
SPR 1968	0	93	93	0	0	0	0
SUM 1968	0	93	93	0	0	0	0
WIN 1968	0	93	93	0	0	0	0
SPR 1969	0	93	93	0	0	0	0
SUM 1969	0	93	93	0	0	0	0
WIN 1969	0	93	93	0	0	0	0
SPR 1970	0	93	93	0	0	0	0
SUM 1970	0	93	93	0	0	0	0
WIN 1970	0	93	93	0	0	0	0
SPR 1971	0	93	93	0	0	0	0
SUM 1971	0	93	93	0	0	0	0
WIN 1971	0	93	93	0	0	0	0
SPR 1972	0	93	93	0	0	0	0
SUM 1972	0	93	93	0	0	0	0
WIN 1972	0	93	93	0	0	0	0
SPR 1973	0	93	93	0	0	0	0
SUM 1973	0	93	93	0	0	0	0
WIN 1973	0	93	93	0	0	0	0
SPR 1974	0	93	93	0	0	0	0
SUM 1974	0	93	93	0	0	0	0
WIN 1974	0	93	93	0	0	0	0
SPR 1975	0	93	93	0	0	0	0
SUM 1975	0	93	93	0	0	0	0
WIN 1975	0	93	93	0	0	0	0
SPR 1976	0	93	93	0	0	0	0
SUM 1976	0	93	93	0	0	0	0
WIN 1976	0	93	93	0	0	0	0
SPR 1977	0	93	93	0	0	0	0
SUM 1977	0	93	93	0	0	0	0
WIN 1977	0	93	93	0	0	0	0
SPR 1978	0	93	93	0	0	0	0
SUM 1978	0	93	93	0	0	0	0
WIN 1978	0	93	93	0	0	0	0
SPR 1979	0	93	93	0	0	0	0
SUM 1979	0	93	93	0	0	0	0
WIN 1979	0	93	93	0	0	0	0
SPR 1980	0	93	93	0	0	0	0
SUM 1980	0	93	93	0	0	0	0
WIN 1980	0	93	93	0	0	0	0
SPR 1981	0	93	93	0	0	0	0
SUM 1981	0	93	93	0	0	0	0
WIN 1981	0	93	93	0	0	0	0
SPR 1982	0	113	113	0	0	0	0
SUM 1982	0	113	113	0	0	0	0
WIN 1982	0	113	113	0	0	0	0
SPR 1983	0	113	113	0	0	0	0
SUM 1983	0	113	113	0	0	0	0
WIN 1983	0	113	113	0	0	0	0
SPR 1984	0	113	113	0	0	0	0
SUM 1984	0	113	113	0	0	0	0
WIN 1984	0	113	113	0	0	0	0
SPR 1985	0	113	113	0	0	0	0
SUM 1985	0	113	113	0	0	0	0
WIN 1985	0	113	113	0	0	0	0
SPR 1986	0	113	113	0	0	0	0
SUM 1986	0	113	113	0	0	0	0
WIN 1986	0	113	113	0	0	0	0
SPR 1987	0	113	113	0	0	0	0
SUM 1987	0	113	113	0	0	0	0
WIN 1987	0	113	113	0	0	0	0
SPR 1988	0	113	113	0	0	0	0
SUM 1988	0	113	113	0	0	0	0
WIN 1988	0	113	113	0	0	0	0
SPR 1989	0	113	113	0	0	0	0
SUM 1989	0	113	113	0	0	0	0
WIN 1989	0	113	113	0	0	0	0
SPR 1990	0	113	113	0	0	0	0
SUM 1990	0	113	113	0	0	0	0
WIN 1990	0	113	113	0	0	0	0

Entering Dates

Enter the starting year and season for your simulation. The starting date represents the beginning of the analysis period. (Spring is Mar, Apr, May and Jun, Summer is Jul, Aug, Sep and Oct, Winter is Nov, Dec, Jan and Feb.)

Once you have entered the starting date, push the "UPDATE DATE" Button.

The date only needs to be updated once, unless the desired timeframe of the simulation is changed.

Modifying the date does not automatically adjust the location of the rates entered in the table.

Entering Well Locations

Enter the row and column location for the 'TO' well in spreadsheet cell B15 and B16, respectively.

Enter the row and column location for the 'FROM1' well in spreadsheet cell C15 amd C16, respectively.

Enter the row and column location for the 'FROM2' well in spreadsheet cell D15 and D16, respectively.

Enter the row and column location for the 'FROM3' well in spreadsheet cell E15 and E16, respectively.

If the 'FROM2' well is not to be modeled, the entered row and column should be 0 or blank.

If the 'FROM3' well is not to be modeled, the entered row and column should be 0 (zero).

The 'FROM3' well cannot be used if the 'FROM2' well is not being used.

Running the Model

Once the model cells have been specified for the 'FROM' and 'TO' wells, push the 'RUN MODEL' button to generate the response functions. The model only needs to be re-run if the locations of the 'FROM' and 'TO' wells are changed.

Getting the Model Output

Once the model has been run, push the 'GET OUTPUT' button to retrieve the model output. This prepares the model output for use for calculating effects.

Entering water use data

All water use should be entered in units of acre-feet per four month period. See the user's manual for instructions on multiple water rights with different priority dates and/or different wells.

Entering 'TO' Well Projected Water Use

Enter the projected water use for the 'TO' Well in Column B. 'TO' Well water use should start in the trimester (4-month period) in which the transfer will be effective.

Entering 'FROM' Well 'With Transfer' Use

Enter the 'With Transfer' water use for the first 'FROM' Well in Column C, for the second 'FROM' well in Column E, and for the third 'FROM' Well in Column G. 'With Transfer' water use should reflect historical and projected after transfer use for this well and should cease or be reduced at the time of the water right transfer.

Entering 'FROM' Well 'Without Transfer' Use

The 'Without Transfer' Use for the 'FROM' wells should include historical and projected use for each well. The projected use should reflect expected pumpage from that well if the transfer were not to take effect. Enter the 'Without Transfer' water use for the first 'FROM' Well in Column D, for the second 'FROM' well in Column F, and for the third 'FROM' well in Column H. Prior to the expected date of transfer, the 'With Transfer' use should be the same as the 'Without Transfer' use.

If only one 'FROM' well is to be represented, pumpage in columns E, F, G and H should be 0.

If only two 'FROM' wells are being represented, pumpage in Columns G and H should be 0.

Projected water use in the 'TO' well and the 'FROM' wells will be used to estimate the change in effect to the river reaches caused by the water right transfer. (See user's manual.)

Calculating Effect of the Transfer on River Gains and Losses

After all of the above steps have been completed, the effects of the proposed transfer on gains and losses of the eleven hydraulically connected reaches of the Snake River can be estimated by clicking the 'CALCULATE EFFECTS' button. This will result in a multiplication of the response function matrix (determined in the model runs) times the water use rates entered in the table provided in columns B through H. After the multiplication has been performed, the spreadsheet will automatically advance to the GRAPHS worksheet. Here one graph is provided showing the effect for each of the 11 reaches, and a 12th graph illustrates the net effects on all 11 reaches. Results are also presented in tabular form in the CALCULATED EFFECTS worksheet. See the Users Manual for more information.

SPR 1991	0	113	113	0	0	0	0
SUM 1991	0	113	113	0	0	0	0
WIN 1991	0	113	113	0	0	0	0
SPR 1992	0	113	113	0	0	0	0
SUM 1992	0	113	113	0	0	0	0
WIN 1992	0	113	113	0	0	0	0
SPR 1993	0	113	113	0	0	0	0
SUM 1993	0	113	113	0	0	0	0
WIN 1993	0	113	113	0	0	0	0
SPR 1994	0	113	113	0	0	0	0
SUM 1994	0	113	113	0	0	0	0
WIN 1994	0	113	113	0	0	0	0
SPR 1995	0	113	113	0	0	0	0
SUM 1995	0	113	113	0	0	0	0
WIN 1995	0	113	113	0	0	0	0
SPR 1996	0	113	113	0	0	0	0
SUM 1996	0	113	113	0	0	0	0
WIN 1996	0	113	113	0	0	0	0
SPR 1997	0	113	113	0	0	0	0
SUM 1997	0	113	113	0	0	0	0
WIN 1997	0	113	113	0	0	0	0
SPR 1998	0	113	113	0	0	0	0
SUM 1998	0	113	113	0	0	0	0
WIN 1998	0	113	113	0	0	0	0
SPR 1999	0	113	113	0	0	0	0
SUM 1999	0	113	113	0	0	0	0
WIN 1999	0	113	113	0	0	0	0
SPR 2000	0	113	113	0	0	0	0
SUM 2000	0	113	113	0	0	0	0
WIN 2000	0	113	113	0	0	0	0
SPR 2001	0	113	113	0	0	0	0
SUM 2001	0	113	113	0	0	0	0
WIN 2001	0	113	113	0	0	0	0
SPR 2002	0	113	113	0	0	0	0
SUM 2002	0	113	113	0	0	0	0
WIN 2002	0	113	113	0	0	0	0
SPR 2003	0	113	113	0	0	0	0
SUM 2003	0	113	113	0	0	0	0
WIN 2003	0	113	113	0	0	0	0
SPR 2004	0	113	113	0	0	0	0
SUM 2004	0	113	113	0	0	0	0
WIN 2004	0	113	113	0	0	0	0
SPR 2005	0	113	113	0	0	0	0
SUM 2005	0	113	113	0	0	0	0
WIN 2005	0	113	113	0	0	0	0
SPR 2006	0	113	113	0	0	0	0
SUM 2006	0	113	113	0	0	0	0
WIN 2006	0	113	113	0	0	0	0
SPR 2007	0	113	113	0	0	0	0
SUM 2007	0	113	113	0	0	0	0
WIN 2007	0	113	113	0	0	0	0
SPR 2008	0	113	113	0	0	0	0
SUM 2008	0	113	113	0	0	0	0
WIN 2008	0	113	113	0	0	0	0
SPR 2009	0	113	113	0	0	0	0
SUM 2009	0	113	113	0	0	0	0
WIN 2009	0	113	113	0	0	0	0
SPR 2010	0	113	113	0	0	0	0
SUM 2010	0	113	113	0	0	0	0
WIN 2010	0	113	113	0	0	0	0
SPR 2011	0	113	113	0	0	0	0
SUM 2011	0	113	113	0	0	0	0
WIN 2011	0	113	113	0	0	0	0
SPR 2012	0	113	113	0	0	0	0
SUM 2012	0	113	113	0	0	0	0
WIN 2012	0	113	113	0	0	0	0
SPR 2013	0	113	113	0	0	0	0
SUM 2013	0	113	113	0	0	0	0
WIN 2013	0	113	113	0	0	0	0
SPR 2014	0	113	113	0	0	0	0
SUM 2014	0	113	113	0	0	0	0
WIN 2014	0	113	113	0	0	0	0
SPR 2015	0	113	113	0	0	0	0
SUM 2015	0	113	113	0	0	0	0
WIN 2015	0	113	113	0	0	0	0
SPR 2016	0	113	113	0	0	0	0
SUM 2016	0	113	113	0	0	0	0
WIN 2016	0	113	113	0	0	0	0
SPR 2017	0	113	113	0	0	0	0
SUM 2017	0	113	113	0	0	0	0
WIN 2017	0	113	113	0	0	0	0
SPR 2018	0	113	113	0	0	0	0
SUM 2018	0	113	113	0	0	0	0
WIN 2018	0	113	113	0	0	0	0
SPR 2019	0	113	113	0	0	0	0
SUM 2019	0	113	113	0	0	0	0
WIN 2019	0	113	113	0	0	0	0
SPR 2020	0	113	113	0	0	0	0
SUM 2020	0	113	113	0	0	0	0
WIN 2020	0	113	113	0	0	0	0
SPR 2021	113	0	113	0	0	0	0
SUM 2021	113	0	113	0	0	0	0
WIN 2021	113	0	113	0	0	0	0
SPR 2022	113	0	113	0	0	0	0
SUM 2022	113	0	113	0	0	0	0
WIN 2022	113	0	113	0	0	0	0
SPR 2023	113	0	113	0	0	0	0
SUM 2023	113	0	113	0	0	0	0
WIN 2023	113	0	113	0	0	0	0
SPR 2024	113	0	113	0	0	0	0
SUM 2024	113	0	113	0	0	0	0
WIN 2024	113	0	113	0	0	0	0
SPR 2025	113	0	113	0	0	0	0
SUM 2025	113	0	113	0	0	0	0
WIN 2025	113	0	113	0	0	0	0
SPR 2026	113	0	113	0	0	0	0
SUM 2026	113	0	113	0	0	0	0
WIN 2026	113	0	113	0	0	0	0
SPR 2027	113	0	113	0	0	0	0
SUM 2027	113	0	113	0	0	0	0
WIN 2027	113	0	113	0	0	0	0
SPR 2028	113	0	113	0	0	0	0
SUM 2028	113	0	113	0	0	0	0
WIN 2028	113	0	113	0	0	0	0
SPR 2029	113	0	113	0	0	0	0
SUM 2029	113	0	113	0	0	0	0
WIN 2029	113	0	113	0	0	0	0
SPR 2030	113	0	113	0	0	0	0
SUM 2030	113	0	113	0	0	0	0
WIN 2030	113	0	113	0	0	0	0
SPR 2031	113	0	113	0	0	0	0
SUM 2031	113	0	113	0	0	0	0
WIN 2031	113	0	113	0	0	0	0
SPR 2032	113	0	113	0	0	0	0
SUM 2032	113	0	113	0	0	0	0
WIN 2032	113	0	113	0	0	0	0
SPR 2033	113	0	113	0	0	0	0
SUM 2033	113	0	113	0	0	0	0
WIN 2033	113	0	113	0	0	0	0
SPR 2034	113	0	113	0	0	0	0
SUM 2034	113	0	113	0	0	0	0
WIN 2034	113	0	113	0	0	0	0
SPR 2035	113	0	113	0	0	0	0
SUM 2035	113	0	113	0	0	0	0
WIN 2035	113	0	113	0	0	0	0
SPR 2036	113	0	113	0	0	0	0
SUM 2036	113	0	113	0	0	0	0
WIN 2036	113	0	113	0	0	0	0
SPR 2037	113	0	113	0	0	0	0
SUM 2037	113	0	113	0	0	0	0
WIN 2037	113	0	113	0	0	0	0
SPR 2038	113	0	113	0	0	0	0

SUM 2038	113	0	113	0	0	0	0
WIN 2038	113	0	113	0	0	0	0
SPR 2039	113	0	113	0	0	0	0
SUM 2039	113	0	113	0	0	0	0
WIN 2039	113	0	113	0	0	0	0
SPR 2040	113	0	113	0	0	0	0
SUM 2040	113	0	113	0	0	0	0
WIN 2040	113	0	113	0	0	0	0
SPR 2041	113	0	113	0	0	0	0
SUM 2041	113	0	113	0	0	0	0
WIN 2041	113	0	113	0	0	0	0
SPR 2042	113	0	113	0	0	0	0
SUM 2042	113	0	113	0	0	0	0
WIN 2042	113	0	113	0	0	0	0
SPR 2043	113	0	113	0	0	0	0
SUM 2043	113	0	113	0	0	0	0
WIN 2043	113	0	113	0	0	0	0
SPR 2044	113	0	113	0	0	0	0
SUM 2044	113	0	113	0	0	0	0
WIN 2044	113	0	113	0	0	0	0
SPR 2045	113	0	113	0	0	0	0
SUM 2045	113	0	113	0	0	0	0
WIN 2045	113	0	113	0	0	0	0
SPR 2046	113	0	113	0	0	0	0
SUM 2046	113	0	113	0	0	0	0
WIN 2046	113	0	113	0	0	0	0
SPR 2047	113	0	113	0	0	0	0
SUM 2047	113	0	113	0	0	0	0
WIN 2047	113	0	113	0	0	0	0
SPR 2048	113	0	113	0	0	0	0
SUM 2048	113	0	113	0	0	0	0
WIN 2048	113	0	113	0	0	0	0
SPR 2049	113	0	113	0	0	0	0
SUM 2049	113	0	113	0	0	0	0
WIN 2049	113	0	113	0	0	0	0
SPR 2050	113	0	113	0	0	0	0
SUM 2050	113	0	113	0	0	0	0
WIN 2050	113	0	113	0	0	0	0
SPR 2051	113	0	113	0	0	0	0
SUM 2051	113	0	113	0	0	0	0
WIN 2051	113	0	113	0	0	0	0
SPR 2052	113	0	113	0	0	0	0
SUM 2052	113	0	113	0	0	0	0
WIN 2052	113	0	113	0	0	0	0
SPR 2053	113	0	113	0	0	0	0
SUM 2053	113	0	113	0	0	0	0
WIN 2053	113	0	113	0	0	0	0
SPR 2054	113	0	113	0	0	0	0
SUM 2054	113	0	113	0	0	0	0
WIN 2054	113	0	113	0	0	0	0
SPR 2055	113	0	113	0	0	0	0
SUM 2055	113	0	113	0	0	0	0
WIN 2055	113	0	113	0	0	0	0
SPR 2056	113	0	113	0	0	0	0
SUM 2056	113	0	113	0	0	0	0
WIN 2056	113	0	113	0	0	0	0
SPR 2057	113	0	113	0	0	0	0
SUM 2057	113	0	113	0	0	0	0
WIN 2057	113	0	113	0	0	0	0
SPR 2058	113	0	113	0	0	0	0
SUM 2058	113	0	113	0	0	0	0
WIN 2058	113	0	113	0	0	0	0
SPR 2059	113	0	113	0	0	0	0
SUM 2059	113	0	113	0	0	0	0
WIN 2059	113	0	113	0	0	0	0
SPR 2060	113	0	113	0	0	0	0
SUM 2060	113	0	113	0	0	0	0
WIN 2060	113	0	113	0	0	0	0
SPR 2061	113	0	113	0	0	0	0
SUM 2061	113	0	113	0	0	0	0
WIN 2061	113	0	113	0	0	0	0
SPR 2062	113	0	113	0	0	0	0
SUM 2062	113	0	113	0	0	0	0
WIN 2062	113	0	113	0	0	0	0
SPR 2063	113	0	113	0	0	0	0
SUM 2063	113	0	113	0	0	0	0
WIN 2063	113	0	113	0	0	0	0
SPR 2064	113	0	113	0	0	0	0
SUM 2064	113	0	113	0	0	0	0
WIN 2064	113	0	113	0	0	0	0
SPR 2065	113	0	113	0	0	0	0
SUM 2065	113	0	113	0	0	0	0
WIN 2065	113	0	113	0	0	0	0
SPR 2066	113	0	113	0	0	0	0
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WIN 2066	113	0	113	0	0	0	0
SPR 2067	113	0	113	0	0	0	0
SUM 2067	113	0	113	0	0	0	0
WIN 2067	113	0	113	0	0	0	0
SPR 2068	113	0	113	0	0	0	0
SUM 2068	113	0	113	0	0	0	0
WIN 2068	113	0	113	0	0	0	0
SPR 2069	113	0	113	0	0	0	0
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WIN 2069	113	0	113	0	0	0	0
SPR 2070	113	0	113	0	0	0	0
SUM 2070	113	0	113	0	0	0	0
WIN 2070	113	0	113	0	0	0	0
SPR 2071	113	0	113	0	0	0	0
SUM 2071	113	0	113	0	0	0	0
WIN 2071	113	0	113	0	0	0	0
SPR 2072	113	0	113	0	0	0	0
SUM 2072	113	0	113	0	0	0	0
WIN 2072	113	0	113	0	0	0	0
SPR 2073	113	0	113	0	0	0	0
SUM 2073	113	0	113	0	0	0	0
WIN 2073	113	0	113	0	0	0	0
SPR 2074	113	0	113	0	0	0	0
SUM 2074	113	0	113	0	0	0	0
WIN 2074	113	0	113	0	0	0	0
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SPR 2085	113	0	113	0	0	0	0
SUM 2085	113	0	113	0	0	0	0

WIN 2085	113	0	113	0	0	0	0
SPR 2086	113	0	113	0	0	0	0
SUM 2086	113	0	113	0	0	0	0
WIN 2086	113	0	113	0	0	0	0
SPR 2087	113	0	113	0	0	0	0
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WIN 2087	113	0	113	0	0	0	0
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SPR 2091	113	0	113	0	0	0	0
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WIN 2091	113	0	113	0	0	0	0
SPR 2092	113	0	113	0	0	0	0
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WIN 2092	113	0	113	0	0	0	0
SPR 2093	113	0	113	0	0	0	0
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WIN 2093	113	0	113	0	0	0	0
SPR 2094	113	0	113	0	0	0	0
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WIN 2094	113	0	113	0	0	0	0
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WIN 2095	113	0	113	0	0	0	0
SPR 2096	113	0	113	0	0	0	0
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WIN 2096	113	0	113	0	0	0	0
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SPR 2098	113	0	113	0	0	0	0
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WIN 2098	113	0	113	0	0	0	0
SPR 2099	113	0	113	0	0	0	0
SUM 2099	113	0	113	0	0	0	0
WIN 2099	113	0	113	0	0	0	0
SPR 2100	113	0	113	0	0	0	0
SUM 2100	113	0	113	0	0	0	0
WIN 2100	113	0	113	0	0	0	0
SPR 2101	113	0	113	0	0	0	0
SUM 2101	113	0	113	0	0	0	0
WIN 2101	113	0	113	0	0	0	0
SPR 2102	113	0	113	0	0	0	0
SUM 2102	113	0	113	0	0	0	0
WIN 2102	113	0	113	0	0	0	0
SPR 2103	113	0	113	0	0	0	0
SUM 2103	113	0	113	0	0	0	0
WIN 2103	113	0	113	0	0	0	0
SPR 2104	113	0	113	0	0	0	0
SUM 2104	113	0	113	0	0	0	0
WIN 2104	113	0	113	0	0	0	0

ESPA Ground Water Rights Transfer Spreadsheet Data Summary

TRANSFER NO: TBD
TRANSFER NAME: TWB (Irrigation)

PREPARED BY: Terry Scanlan
DATE: 10/7/2020
Transfer Tool Version Version 3.2

BLUE CELLS ARE SET UP FOR USER ENTRIES

WATER RIGHTS INVOLVED:

Group 1 Transfer Rights		Group 2 Additional Mitigation Rights	
Right No.	Priority Date	Right No.	Priority Date
36-2283	5/10/1955		
36-14617	5/1/1982		

HISTORIC BENEFICIAL USE:

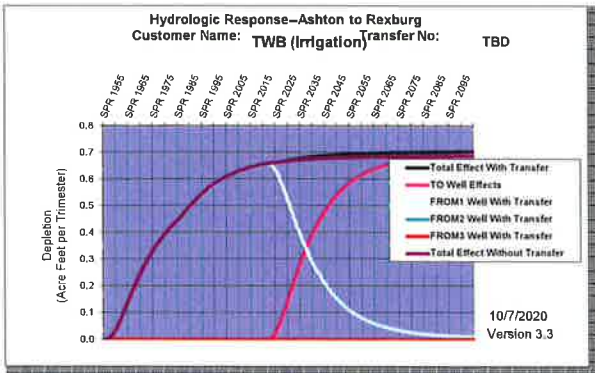
Trans/Mit. Rights (group no.)	Acres to Dry Up (ac)	Beneficial Use (afa/yr)	Total (af/yr)
1	113.4	340.2	340.2

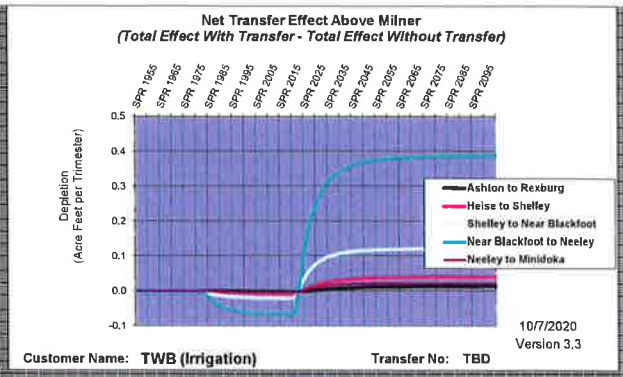
MITIGATION NOTES:

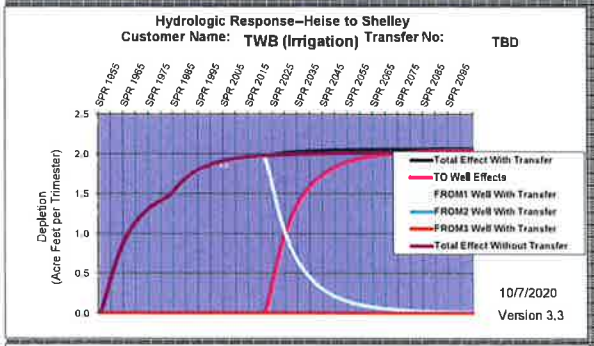
MODEL CELL LOCATIONS:

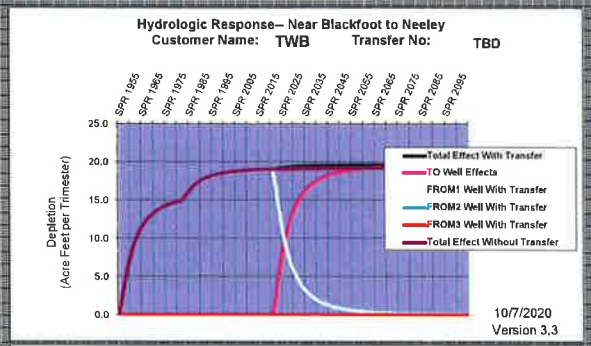
	TO WELL	FROM1 WELL	FROM2 WELL	FROM3 WELL
ROW	56	56	0	0
COLUMN	32	30	0	0

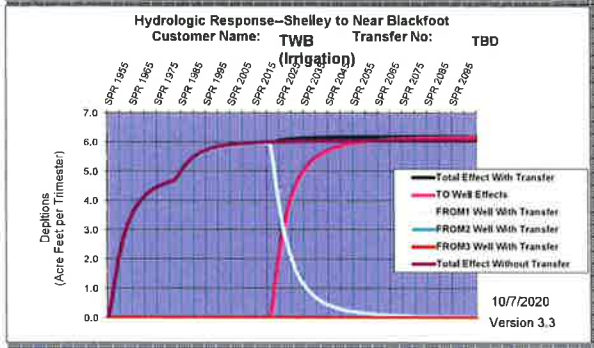
	Start Date		End Date		Water Use		Acres Authorized	Notes
	Season	Year	Season	Year	Annual (af/yr)	Trimester (af/trimester)	(acres)	
TO Well (Projected Use)	Spring	2021	Winter	2170	340.2	113.4	113.4	
FROM1 Well (With Transfer)	Spring	1955	Winter	1981	279	93.0	93.0	
	Spring	1982	Winter	2020	340.2	113.4	113.4	
	Spring	2021	Winter	2070	0	0.0	0.0	
FROM1 Well (Without Transfer)	Spring	1955	Winter	1981	279	93.0	93.0	
	Spring	1982	Winter	2170	340.2	113.4	113.4	
FROM2 Well (With Transfer)								
FROM2 Well (Without Transfer)								
FROM3 Well (With Transfer)								
FROM3 Well (Without Transfer)								

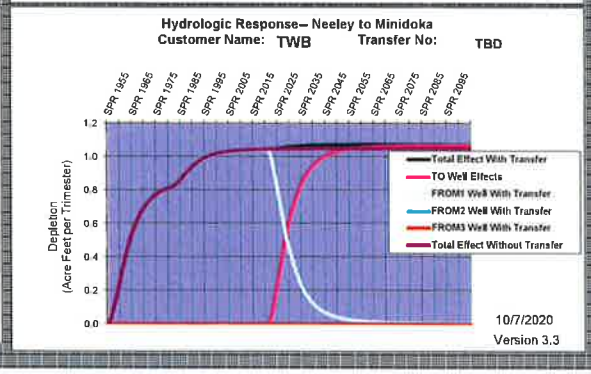

Hydrologic Response--Ashton to Rexburg
Customer Name: TWB (Irrigation) Transfer No: TBD
Depletion (Acre Feet per Trimester)
Total Effect With Transfer
TO Well Effects
FROM1 Well With Transfer
FROM2 Well With Transfer
FROM3 Well With Transfer
Total Effect Without Transfer
10/7/2020
Version 3.3

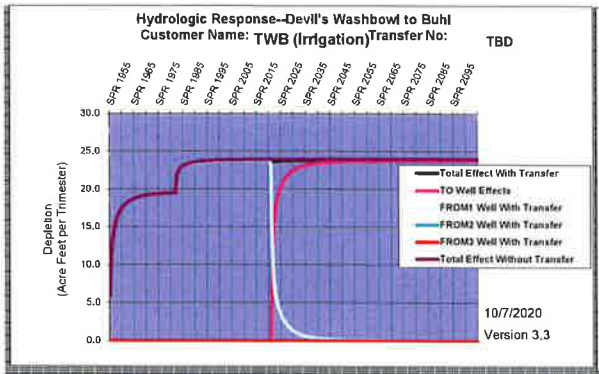

Net Transfer Effect Above Milner
(Total Effect With Transfer - Total Effect Without Transfer)
Depletion (Acre Feet per Trimester)
Ashton to Rexburg
Heise to Shelley
Shelley to Near Blackfoot
Near Blackfoot to Neeley
Neeley to Minidoka
10/7/2020
Version 3.3
Customer Name: TWB (Irrigation)
Transfer No: TBD

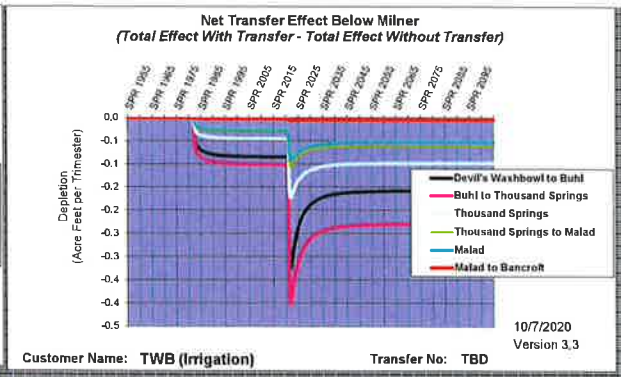

Hydrologic Response--Heise to Shelley
Customer Name: TWB (Irrigation) Transfer No: TBD
Depletion (Acre Feet per Trimester)
Total Effect With Transfer
TO Well Effects
FROM1 Well With Transfer
FROM2 Well With Transfer
FROM3 Well With Transfer
Total Effect Without Transfer
10/7/2020
Version 3.3

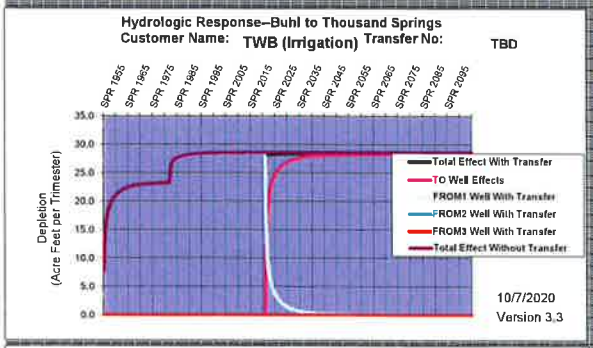

Hydrologic Response-- Near Blackfoot to Neeley
Customer Name: TWB Transfer No: TBD
Depletion (Acre Feet per Trimester)
Total Effect With Transfer
TO Well Effects
FROM1 Well With Transfer
FROM2 Well With Transfer
FROM3 Well With Transfer
Total Effect Without Transfer
10/7/2020
Version 3.3

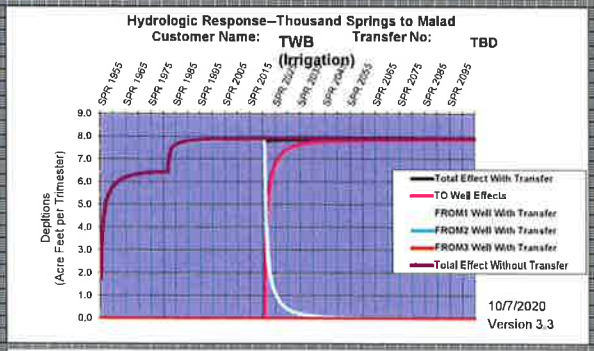

Hydrologic Response--Shelley to Near Blackfoot
Customer Name: TWB (Irrigation) Transfer No: TBD
Depletions (Acre Feet per Trimester)
Total Effect With Transfer
TO Well Effects
FROM1 Well With Transfer
FROM2 Well With Transfer
FROM3 Well With Transfer
Total Effect Without Transfer
10/7/2020
Version 3.3

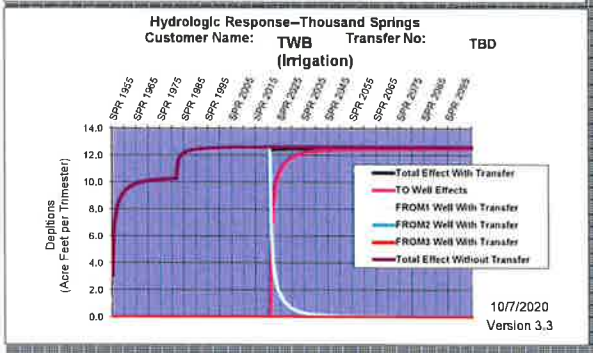

Hydrologic Response-- Neeley to Minidoka
Customer Name: TWB Transfer No: TBD
Depletion (Acre Feet per Trimester)
Total Effect With Transfer
TO Well Effects
FROM1 Well With Transfer
FROM2 Well With Transfer
FROM3 Well With Transfer
Total Effect Without Transfer
10/7/2020
Version 3.3

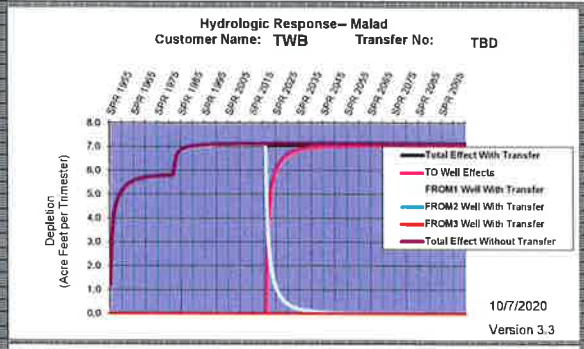

Hydrologic Response--Devil's Washbowl to Buhl
Customer Name: TWB (Irrigation) Transfer No: TBD
Depletion (Acre Feet per Trimester)
Total Effect With Transfer
TO Well Effects
FROM1 Well With Transfer
FROM2 Well With Transfer
FROM3 Well With Transfer
Total Effect Without Transfer
10/7/2020
Version 3.3

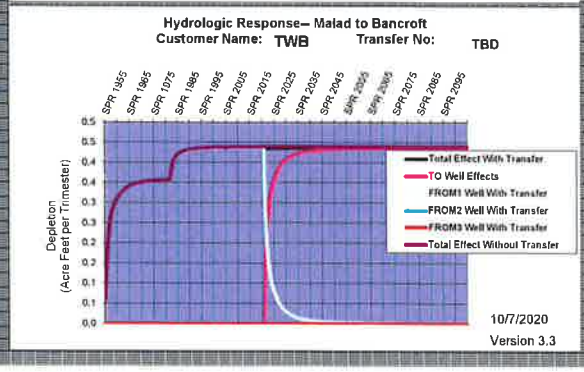

Net Transfer Effect Below Milner
(Total Effect With Transfer - Total Effect Without Transfer)
Depletion (Acre Feet per Trimester)
Devil's Washbowl to Buhl
Buhl to Thousand Springs
Thousand Springs
Thousand Springs to Malad
Malad
Malad to Bancroft
10/7/2020
Version 3.3
Customer Name: TWB (Irrigation)
Transfer No: TBD

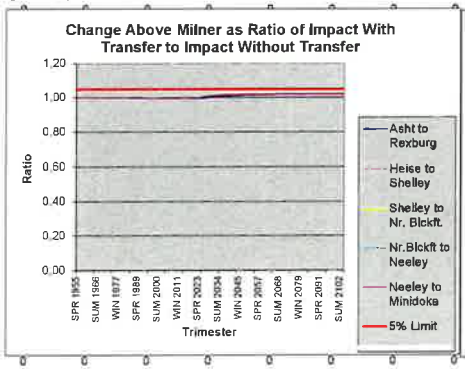

Hydrologic Response--Buhl to Thousand Springs
Customer Name: TWB (Irrigation) Transfer No: TBD
Depletion (Acre Feet per Trimester)
Total Effect With Transfer
TO Well Effects
FROM1 Well With Transfer
FROM2 Well With Transfer
FROM3 Well With Transfer
Total Effect Without Transfer
10/7/2020
Version 3.3

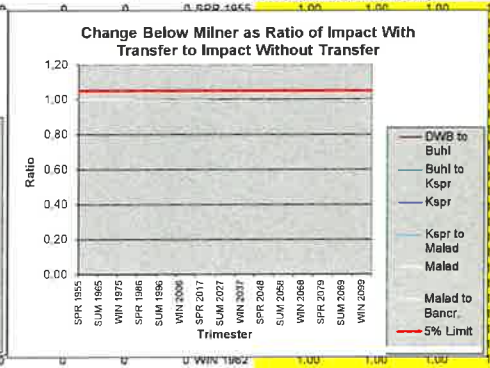

Hydrologic Response--Thousand Springs to Malad
Customer Name: TWB (Irrigation) Transfer No: TBD
Depletions (Acre Feet per Trimester)
Total Effect With Transfer
TO Well Effects
FROM1 Well With Transfer
FROM2 Well With Transfer
FROM3 Well With Transfer
Total Effect Without Transfer
10/7/2020
Version 3.3


Hydrologic Response--Thousand Springs
Customer Name: TWB (Irrigation) Transfer No: TBD
Depletions (Acre Feet per Trimester)
Total Effect With Transfer
TO Well Effects
FROM1 Well With Transfer
FROM2 Well With Transfer
FROM3 Well With Transfer
Total Effect Without Transfer
10/7/2020
Version 3.3


Hydrologic Response-- Malad
Customer Name: TWB Transfer No: TBD
Depletion (Acre Feet per Trimester)
Total Effect With Transfer
TO Well Effects
FROM1 Well With Transfer
FROM2 Well With Transfer
FROM3 Well With Transfer
Total Effect Without Transfer
10/7/2020
Version 3.3


Hydrologic Response-- Malad to Bancroft
Customer Name: TWB Transfer No: TBD
Depletion (Acre Feet per Trimester)
Total Effect With Transfer
TO Well Effects
FROM1 Well With Transfer
FROM2 Well With Transfer
FROM3 Well With Transfer
Total Effect Without Transfer
10/7/2020
Version 3.3





period	Rexburg	Shelley	Nr Blckft	Neeley	Minidoka	Buhl	Kspr	Malad	Bancroft	period	Asht to Rex	Heise to Sh	Shelley to	Nr.Blckft to	Neeley to I	DWB to Bu	Buhl to Ksp	Kspr	Kspr to Ma	Malad	Malad to Bancr.	5% Limit
SPR 1955	0	0	0	0	0	0	0	0	0	0 SPR 1955	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	100.0%	1.05
SUM 1955	0	0	0	0	0	0	0	0	0	0 SUM 1955	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	100.0%	1.05
WIN 1955	0	0	0	0	0	0	0	0	0	0 WIN 1955	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	100.0%	1.05
SPR 1956	0	0	0	0	0	0	0	0	0	0 SPR 1956	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	100.0%	1.05
SUM 1956	0	0	0	0	0	0	0	0	0	0 SUM 1956	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	100.0%	1.05
WIN 1956	0	0	0	0	0	0	0	0	0	0 WIN 1956	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	100.0%	1.05
SPR 1957	0	0	0	0	0	0	0	0	0	0 SPR 1957	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	100.0%	1.05
SUM 1957	0	0	0	0	0	0	0	0	0	0 SUM 1957	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	100.0%	1.05
WIN 1957	0	0	0	0	0	0	0	0	0	0 WIN 1957	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	100.0%	1.05
SPR 1958	0	0	0	0	0	0	0	0	0	0 SPR 1958	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	100.0%	1.05
SUM 1958	0	0	0	0	0	0	0	0	0	0 SUM 1958	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	100.0%	1.05
WIN 1958	0	0	0	0	0	0	0	0	0	0 WIN 1958	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	100.0%	1.05
SPR 1959	0	0	0	0	0	0	0	0	0	0 SPR 1959	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	100.0%	1.05
SUM 1959	0	0	0	0	0	0	0	0	0	0 SUM 1959	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	100.0%	1.05
WIN 1959	0	0	0	0	0	0	0	0	0	0 WIN 1959	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	100.0%	1.05
SPR 1960	0	0	0	0	0	0	0	0	0	0 SPR 1960	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	100.0%	1.05
SUM 1960	0	0	0	0	0	0	0	0	0	0 SUM 1960	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	100.0%	1.05
WIN 1960	0	0	0	0	0	0	0	0	0	0 WIN 1960	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	100.0%	1.05
SPR 1961	0	0	0	0	0	0	0	0	0	0 SPR 1961	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	100.0%	1.05
SUM 1961	0	0	0	0	0	0	0	0	0	0 SUM 1961	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	100.0%	1.05
WIN 1961	0	0	0	0	0	0	0	0	0	0 WIN 1961	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	100.0%	1.05
SPR 1962	0	0	0	0	0	0	0	0	0	0 SPR 1962	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	100.0%	1.05
SUM 1962	0	0	0	0	0	0	0	0	0	0 SUM 1962	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	100.0%	1.05
WIN 1962	0	0	0	0	0	0	0	0	0	0 WIN 1962	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	100.0%	1.05
SPR 1963	0	0	0	0	0	0	0	0	0	0 SPR 1963	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	100.0%	1.05
SUM 1963	0	0	0	0	0	0	0	0	0	0 SUM 1963	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	100.0%	1.05
WIN 1963	0	0	0	0	0	0	0	0	0	0 WIN 1963	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	100.0%	1.05
SPR 1964	0	0	0	0	0	0	0	0	0	0 SPR 1964	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	100.0%	1.05
SUM 1964	0	0	0	0	0	0	0	0	0	0 SUM 1964	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	100.0%	1.05
WIN 1964	0	0	0	0	0	0	0	0	0	0 WIN 1964	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	100.0%	1.05
SPR 1965	0	0	0	0	0	0	0	0	0	0 SPR 1965	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	100.0%	1.05
SUM 1965	0	0	0	0	0	0	0	0	0	0 SUM 1965	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	100.0%	1.05
WIN 1965	0	0	0	0	0	0	0	0	0	0 WIN 1965	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	100.0%	1.05
SPR 1966	0	0	0	0	0	0	0	0	0	0 SPR 1966	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	100.0%	1.05
SUM 1966	0	0	0	0	0	0	0	0	0	0 SUM 1966	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	100.0%	1.05
WIN 1966	0	0	0	0	0	0	0	0	0	0 WIN 1966	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	100.0%	1.05
SPR 1967	0	0	0	0	0	0	0	0	0	0 SPR 1967	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	100.0%	1.05
SUM 1967	0	0	0	0	0	0	0	0	0	0 SUM 1967	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	100.0%	1.05
WIN 1967	0	0	0	0	0	0	0	0	0	0 WIN 1967	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	100.0%	1.05
SPR 1968	0	0	0	0	0	0	0	0	0	0 SPR 1968	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	100.0%	1.05
SUM 1968	0	0	0	0	0	0	0	0	0	0 SUM 1968	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	100.0%	1.05
WIN 1968	0	0	0	0	0	0	0	0	0	0 WIN 1968	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	100.0%	1.05
SPR 1969	0	0	0	0	0	0	0	0	0	0 SPR 1969	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	100.0%	1.05
SUM 1969	0	0	0	0	0	0	0	0	0	0 SUM 1969	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	100.0%	1.05
WIN 1969	0	0	0	0	0	0	0	0	0	0 WIN 1969	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	100.0%	1.05
SPR 1970	0	0	0	0	0	0	0	0	0	0 SPR 1970	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	100.0%	1.05
SUM 1970	0	0	0	0	0	0	0	0	0	0 SUM 1970	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	100.0%	1.05
WIN 1970	0	0	0	0	0	0	0	0	0	0 WIN 1970	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	100.0%	1.05
SPR 1971	0	0	0	0	0	0	0	0	0	0 SPR 1971	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	100.0%	1.05
SUM 1971	0	0	0	0	0	0	0	0	0	0 SUM 1971	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	100.0%	1.05
WIN 1971	0	0	0	0	0	0	0	0	0	0 WIN 1971	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	100.0%	1.05
SPR 1972	0	0	0	0	0	0	0	0	0	0 SPR 1972	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	100.0%	1.05
SUM 1972	0	0	0	0	0	0	0	0	0	0 SUM 1972	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	100.0%	1.05
WIN 1972	0	0	0	0	0	0	0	0	0	0 WIN 1972	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	100.0%	1.05
SPR 1973	0	0	0	0	0	0	0	0	0	0 SPR 1973	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	100.0%	1.05
SUM 1973	0	0	0	0	0	0	0	0	0	0 SUM 1973	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	100.0%	1.05
WIN 1973	0	0	0	0	0	0	0	0	0	0 WIN 1973	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	100.0%	1.05
SPR 1974	0	0	0	0	0	0	0	0	0	0 SPR 1974	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	100.0%	1.05
SUM 1974	0	0	0	0	0	0	0	0	0	0 SUM 1974	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	100.0%	1.05
WIN 1974	0	0	0	0	0	0	0	0	0	0 WIN 1974	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	100.0%	1.05
SPR 1975	0	0	0	0	0	0	0	0	0	0 SPR 1975	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	100.0%	1.05
SUM 1975	0	0	0	0	0	0	0	0	0	0 SUM 1975	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	100.0%	1.05
WIN 1975	0	0	0	0	0	0	0	0	0	0 WIN 1975	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	100.0%	1.05
SPR 1976	0	0	0	0	0	0	0	0	0	0 SPR 1976	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	100.0%	1.05
SUM 1976	0	0	0	0	0	0	0	0	0	0 SUM 1976	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	100.0%	1.05
WIN 1976	0	0	0	0	0	0	0	0	0	0 WIN 1976	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	100.0%	1.05
SPR 1977	0	0	0	0	0	0	0	0	0	0 SPR 1977	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	100.0%	1.05
SUM 1977	0	0	0	0	0	0	0	0	0	0 SUM 1977	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	100.0%	1.05
WIN 1977	0	0	0	0	0	0	0	0	0	0 WIN 1977	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	100.0%	1.05
SPR 1978	0	0	0	0	0	0	0	0	0	0 SPR 1978	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	100.0%	1.05
SUM 1978	0	0	0	0	0	0	0	0	0	0 SUM 1978	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	100.0%	1.05
WIN 1978	0	0	0	0	0	0	0	0	0	0 WIN 1978	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	100.0%	1.05
SPR 1979	0	0	0	0	0	0	0	0	0	0 SPR 1979	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	100.0%	1.05
SUM 1979	0	0	0	0	0	0	0	0	0	0 SUM 1979	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	100.0%	1.05
WIN 1979	0	0	0	0	0	0	0	0	0	0 WIN 1979	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	100.0%	1.05
SPR 1980	0	0	0	0	0	0	0	0	0	0 SPR 1980	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	100.0%	1.05

Enter First Time Step of Transfer: SPR 2021

Match: 199 Match: 456

	AtR	HtS	StNB	NBtN	NtM	DWtB	BtTS	TS	TStM	M	MtB	Total	
Preexisting Effects @ SS (Last Time Step):	0.69	2.03	6.07	19.25	1.05	23.99	28.63	12.62	7.93	7.14	0.44	109.85	Total Effects without Transfer - Last Timestep
Steady State - Value of Dep. @ Last Time Step:	0.70	2.07	6.20	19.64	1.07	23.83	28.40	12.53	7.87	7.09	0.44	109.84	Total Effects with Transfer - Last Time Step
Preexisting Effects @ Transient State (Max Value Timestep):	0.69	2.03	6.07	19.25	1.05	23.99	28.63	12.62	7.93	7.14	0.44	109.85	Total Effects without Transfer - Correlates to Max Value from Total Effects with Transfer
Transient State - Max. Value of Dep. After Transfer:	0.70	2.07	6.20	19.64	1.07	23.83	28.40	12.53	7.87	7.09	0.44	109.84	Total Effects with Transfer - Max Value from Start of Transfer to Last Time Step
Steady State Change:	0.01	0.04	0.12	0.39	0.02	-0.16	-0.23	-0.10	-0.06	-0.05	0.00		
Transient State Change:	0.01	0.04	0.12	0.39	0.02	-0.16	-0.23	-0.10	-0.06	-0.05	0.00		

Mitigation Analysis Period

Trimester

One-Way Analysis of Independent Transfers

Irrigation Transfer2 TWB

WR No.	Div. Rate (CFS)	Con. Vol. (AFA)	No. of Irr. Acres	Priority Date	POD Location	Dedicated Vol. AFA/ AFT		Model Node
Transfer 1: Proposed Steady State Impacts following Transfer								
???	???	0.0	0.0		0	0	0.0	0
???	???	0	0		0	0	0.0	0
Transfer 1: Worst Case Transient State Impacts following Transfer								
???	???	0	0		0	0	0.0	0
???	???	0	0		0	0	0.0	0

Impact by Reach (AF/Trimester)

Ashton to Rexburg	Heise to Shelley	Shelley to Nr Blckft	Nr Blckft To Neeley	Neeley to Minidoka	Dev. Wbl. To Buhl	Buhl to Kspr	Kspr	Kspr to Malad	Malad	Malad to Bancroft
0.69	2.03	6.07	19.25	1.05	23.99	28.63	12.62	7.93	7.14	0.44
0.70	2.07	6.20	19.64	1.07	23.83	28.40	12.53	7.87	7.09	0.44
0.69	2.03	6.07	19.25	1.05	23.99	28.63	12.62	7.93	7.14	0.44
0.70	2.07	6.20	19.64	1.07	23.83	28.40	12.53	7.87	7.09	0.44

		Ashton to Rexburg	Heise to Shelley	Shelley to Nr Blckft	Nr Blckft To Neeley	Neeley to Minidoka	Dev. Wbl. To Buhl	Buhl to Kspr	Kspr	Kspr to Malad	Malad	Malad to Bancroft
Steady State Analysis	Mitigation Check 1 - >10% of Historical:	2.0%	2.0%	2.0%	2.0%	2.0%	-0.7%	-0.8%	-0.8%	-0.8%	-0.7%	-0.7%
	Mitigation Check 2: > 2 AF/T:	0.0	0.0	0.1	0.4	0.0	-0.2	-0.2	-0.1	-0.1	-0.1	0.0
	Mitigation Check 3 - >10% of Total:	0.6%	1.9%	5.6%	17.9%	1.0%	21.7%	25.9%	11.4%	7.2%	6.5%	0.4%
	Mitigation Required?:	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
	Mitigation Vol. Req'd (ac-ft):	0.0	0.0	0.1	0.4	0.0	-0.2	-0.2	-0.1	-0.1	-0.1	0.0
Transient State Analysis	Mitigation Check 1 - >10% of Historical:	2.0%	2.0%	2.0%	2.0%	2.0%	-0.7%	-0.8%	-0.8%	-0.8%	-0.7%	-0.7%
	Mitigation Check 2: > 2.01 AF/T:	0.0	0.0	0.1	0.4	0.0	-0.2	-0.2	-0.1	-0.1	-0.1	0.0
	Mitigation Required?:	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
	Mitigation Vol. Req'd (ac-ft):	0.0	0.0	0.1	0.4	0.0	-0.2	-0.2	-0.1	-0.1	-0.1	0.0

Read Me