

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

Transfer No.

82067

RECEIVED

NOV 22 2017

Department of Water Resources
Eastern Region

MINIMUM REQUIREMENTS CHECKLIST
TO BE SUBMITTED WITH APPLICATION FOR TRANSFER

An application for transfer must be prepared in accordance with the minimum requirements listed below to be acceptable for processing by the Department. Incomplete applications will be returned. The instructions, fee schedule, Part 2A reports and additional Part 2B forms are available from any Department office or on the Department's website at www.idwr.idaho.gov.

Name of Applicant(s) Houghland Farms, Inc.

Check whether each item below is *attached* (Yes) or *not applicable* (N/A) for the proposed transfer.

Yes **N/A** * Means the item is always required and must be included with the application.

- ☒ * Completed Application for Transfer of Water Right form, Part 1.
- ☒ * Signature of applicant(s) or applicant's authorized representative on Application for Transfer Part 1. Include evidence of authority labeled Attachment #3 (see below) if signed by representative.
- ☒ * Application for Transfer Part 2A. Attach a [Part 2A](#) report describing each water right in the transfer as currently recorded.
- ☒ ☐ Complete and attach an Application for Transfer [Part 2B](#) for each water right for which only a portion is proposed to be changed through this transfer application.
- ☒ * Application for Transfer Part 3A is always required (see Attachment #7a below); Parts 3B and 3C must be completed for transfer applications proposing to change the nature of use of the water right(s) or proposing changes to supplemental right(s).
- ☒ * Correct fee submitted with transfer application form. ([Fee schedule](#) is on website and instructions for application for transfer.)

Attachments to Application - Label each attachment with the corresponding number shown below as Attachment #1-10.

- ☐ ☒ #1 If the applicant is a business, partnership, organization, or association, and not currently registered in the State of Idaho as a business entity, attach documentation identifying officers authorized to sign or act on behalf of right holder. (See Part 1.)
- ☐ ☒ #2a Water Right ownership documentation if Dept. records do not show the applicant as the current water right owner. **
- ☐ ☒ #2b If the ownership of the water right will change as a result of the proposed transfer to a new place of use, attach documentation showing land and water right ownership at the new place of use. Include documentation for all affected land and owner(s).**
** Additional fee(s) required for water right ownership changes; see fee schedule.
- ☐ ☒ #3 Documentation of authority to make the change if the applicant is not the water right owner.
- ☐ ☒ #4 Power of Attorney or documentation providing authority to sign or act on the applicant's behalf. (See Part 1.)
- ☐ ☒ #5 If the transfer application proposes to change the point of diversion for a water right affecting the Eastern Snake Plain Aquifer (ESPA), attach the results of an ESPA analysis and a detailed mitigation plan to offset any depletions to hydraulically connected reaches of the Snake River. ESPA transfer spreadsheet and model grid labeled cells are available on the Department's website at www.idwr.idaho.gov/WaterManagement/WaterRights/WaterRightTransfers/resources.htm.
- ☐ ☒ #6 Notarized statement of agreement or a statement on official letterhead signed by an authorized representative from each lien holder or other entity with financial interest in the water right(s) or land affected by the proposed transfer. (See Part 1.5.c.)
- ☒ * #7a Attach a map identifying the proposed point(s) of diversion, place(s) of use, and water diversion and distribution system details as described on the application. Include legal description labels. If only a portion of the right is proposed to be changed, identify the current location of the part of the existing right(s) proposed to be changed. (See Part 3A.)
- ☒ ☐ #7b If the transfer application proposes to change the place or purpose of use of an irrigation right attach a Geographic Information System ([GIS](#)) shape file, or an aerial photo or other image clearly delineating the location and extent of existing acres and changes to the place of use. If some or all of any right is leased to the Water Supply Bank, you must also show the the specific location and/or acres to be idled at the new, proposed place of use to satisfy lease requirements.
- ☐ ☒ #8a If the transfer application proposes to change the nature of use or period of use for one or more rights, provide documentation describing the extent of historic beneficial use for the water rights proposed to be transferred and document how enlargement will be avoided. (See Part 3B.) Additional fee required for proposed changes to nature of use; see [fee schedule](#).
- ☐ ☒ #8b If the transfer application proposes to change the place of use of a supplemental irrigation right, provide documentation regarding the historic use of the supplemental right(s) and availability or reliability of the primary right(s) being supplemented, both before and after the proposed change. (See Part 3C.)
- ☐ ☒ #9 Water Supply Bank information for all rights proposed for transfer and currently leased to the Bank. ([Attachment WSB](#))
- ☒ ☐ #10 Other. Please describe: Spreadsheets used to calculate change in acres.

**STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES**

**APPLICATION FOR TRANSFER OF WATER RIGHT
PART 1**

Name of Applicant(s) Houghland Farms, Inc. Phone _____

Mailing address 1842 W 800 S, Pingree, ID 83262-1253 Email _____

- ☐ If applicant is not an individual and not registered to do business in the State of Idaho, attach documentation identifying officers authorized to sign or act on behalf of the applicant. Label it **Attachment #1**.
- ☐ Attach water right ownership documentation if Department records do not show the transfer applicant as the current water right owner. Label it **Attachment #2a**.
- ☐ If the ownership of the water right will change as a result of the proposed transfer to a new place of use, attach documentation showing land and water right ownership at the new place of use. Include documentation for all affected land and owner(s). Label it **Attachment #2b**.
- ☐ Attach documentation of authority to make the proposed change if the applicant is not the water right owner. Label it **Attachment #3**.

Provide contact information below if a consultant, attorney, or any other person is representing the applicant in this transfer process.

☐ No Representative

Name of Representative Luke H. Marchant Phone (208) 523-0620

Mailing address PO Box 50130, Idaho Falls, ID 83405 Email lmarchant@holdenlegal.com

- ☐ Send all correspondence for this application to the representative and not to the applicant.
OR
- ☒ Send original correspondence to the applicant and copies to the representative.
- ☐ The representative may submit information for the applicant but is not authorized to sign for the applicant.
OR
- ☒ The representative is authorized to sign for the applicant. Attach a Power of Attorney or other documentation providing authority to sign for the applicant and label it **Attachment #4**.

I hereby assert that no one will be injured by the proposed changes and that the proposed changes do not constitute an enlargement in use of the original right(s). The information contained in this application is true to the best of my knowledge. I understand that any willful misrepresentations made in this application may result in rejection of the application or cancellation of an approval.


Signature of Applicant or Authorized Representative

Luke H. Marchant, Attorney
Print Name and Title if applicable

11/22/2017
Date

Signature of Applicant or Authorized Representative

Print Name and Title if applicable

Date

A. PURPOSE OF TRANSFER

1. ☒ Change point of diversion ☐ Add diversion point(s) ☒ Change place of use
☐ Change nature of use ☐ Change period of use ☐ Other _____

2. Describe your proposal in narrative form, including a detailed description of non-irrigation uses to justify amounts transferred (i.e. number of stock, etc.), and provide additional explanation of any other items on the application. Attach additional pages if necessary and label it **Part 1A.2**.

The purpose of this Application is to change the point of diversion and place of use for 36.6 acres of Water Right No. 35-14140. These 36.6 acres will be combined with Water Right No. 35-2582 to create a 158.6 acre place of use.

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

APPLICATION FOR TRANSFER OF WATER RIGHT

PART 1 Continued

B. DESCRIPTION OF RIGHTS AFTER THE REQUESTED CHANGES. IF THE RIGHTS ARE BEING SPLIT, DESCRIBE PORTIONS TO BE CHANGED AS THEY WOULD APPEAR AFTER THE REQUESTED CHANGES.

1.	<u>Right Number</u>	<u>Amount</u> (cfs/ac-ft)	<u>Nature of Use</u>	<u>Period of Use</u>	<u>Source & Tributary</u>
All or Part ☒ ☐	35-2582	1.8 cfs/488 ac-ft	Irrigation	04/01 to 10/31	Ground water
☐ ☒	35-14140	0.62 cfs/146.4 ac-ft	Irrigation	04/15 to 10/01	Ground water
☐ ☐				to	
☐ ☐				to	
☐ ☐				to	
☐ ☐				to	
☐ ☐				to	
☐ ☐				to	
☐ ☐				to	

Total authorized under rights 2.42 cfs and/or 634.4 acre-feet.

2. Total amount of water proposed to be transferred or changed 1.24 cubic feet per second and/or _____ acre-feet per year.

3. Point(s) of Diversion:

- ☐ No changes to point(s) of diversion are proposed - the following chart is therefore not completed. (Proceed to #4.)
- ☐ Attach Eastern Snake Plain Aquifer analysis if this transfer proposes to change a point of diversion affecting the ESPA.
Label it **Attachment #5**.

New ?	Lot	¼	¼	¼	Sec	Twp	Rge	County	Source	Local name or tag #
		NE	SE	SW	13	04S	32E	Bingham	Ground water	
		NW	SE	SE	13	04S	32E	Bingham	Ground water	

Per Transfer Memo No. 24, Part 12 it is not necessary to run an ESPA analysis when the proposed point of diversion is in a model grid cell adjacent to the current point of diversion. The proposed point of diversion for this transfer is not in an adjacent model grid cell, however, the current point of diversion and the proposed point of diversion are less than two miles apart (the distance from one edge of a model grid cell to the far edge of the adjacent cell is two miles). If the model grid was shifted, the two points of diversion would be in adjacent grid cells. Furthermore, in this area, mitigation is triggered under the model even when moving a point of diversion from one cell to an adjacent cell. Thus, an applicant could be moving his point of diversion a few feet, and if it crossed into a new model grid cell, the model would show that mitigation is required (see attached modeling results). For these reasons, the applicant does not believe that ESPA modeling is necessary for this Application.

Twp	Rge	Sec	NE ¼				NW ¼				SW ¼				SE ¼				Acre Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
04S	32E	13									37.1			23.7			26.9	35.9	123.6
		24	24.2	10.8															35
Total Acres (for irrigation use)																			158.6

**STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES**

**APPLICATION FOR TRANSFER OF WATER RIGHT
PART 1 Continued**

5. General Information:

- a. Describe the complete diversion system, including how you will accommodate a measuring device and lockable controlling works should they be required now or in the future:

Well and pump into pressurized pipeline.

- b. Who owns the property at the point(s) of diversion? Applicant

If other than the applicant, describe the arrangement enabling the applicant to access the property for the diversion system:

- c. Are the lands from which you propose to transfer the water right subject to any liens, deeds of trust, mortgages, or contracts?

If yes, ☐ attach a notarized statement from the holder of the lien, deed of trust, mortgage or contract agreeing to the proposed changes on official letterhead signed by an authorized representative. Label it **Attachment #6**. List the name of the entity and type of lien: _____

It is the applicant's responsibility to provide notice to lien holder, trustee, mortgagor, or contract holder of the proposed changes that may impact or change the value of the water rights or affected real property. Any misrepresentation of legal encumbrance on this application may result in rejection of the application or cancellation of an approval.

- d. Are any of the water rights proposed for transfer currently leased to the Water Supply Bank?

If yes, ☐ complete Attachment WSB.

- e. Describe the effect on the land now irrigated if the place or purpose of use is changed pursuant to this transfer:

It will no longer be irrigated.

- f. Describe the use of any other water right(s) for the same purpose or land, or the same diversion system as right(s) proposed to be transferred at both the existing and proposed point(s) of diversion and place(s) use:

- g. To your knowledge, has/is any portion of the water right(s) proposed to be changed:

Yes No

- | | | |
|--------------------------|-------------------------------------|---|
| ☐ | ☒ | undergone a period of five or more consecutive years of non-use, |
| ☐ | ☒ | currently leased to the Water Supply Bank, |
| ☐ | ☒ | currently used in a mitigation plan limiting the use of water under the right, or |
| ☐ | ☒ | currently enrolled in a Federal set-aside program limiting the use of water under the rights? |

If yes, describe:

Attachment No. 2a
Water Right Ownership
Documentation

IDAHO DEPARTMENT OF WATER RESOURCES
Water Right Report

11/20/2017

WATER RIGHT NO. 35-2582

<u>Owner Type</u>	<u>Name and Address</u>
Current Owner	HOUGHLAND FARMS INC 1842 W 800 S PINGREE, ID 83262-1253 2083282245
Original Owner	LEE B LOFGREEN BLACKFOOT, ID

Priority Date: 11/23/1959

Basis: Decreed

Status: Active

<u>Source</u>	<u>Tributary</u>
GROUND WATER	

<u>Beneficial Use</u>	<u>From</u>	<u>To</u>	<u>Diversion Rate</u>	<u>Volume</u>
IRRIGATION	4/01	10/31	1.8 CFS	488 AFA
Total Diversion			1.8 CFS	

Location of Point(s) of Diversion:

GROUND WATER	NESESW	Sec. 13	Township 04S	Range 32E	BINGHAM County
GROUND WATER	NWSESE	Sec. 13	Township 04S	Range 32E	BINGHAM County

Place(s) of use:

Place of Use Legal Description: IRRIGATION BINGHAM County

<u>Township</u>	<u>Range</u>	<u>Section</u>	<u>Lot</u>	<u>Tract</u>	<u>Acres</u>	<u>Lot</u>	<u>Tract</u>	<u>Acres</u>	<u>Lot</u>	<u>Tract</u>	<u>Acres</u>	<u>Lot</u>	<u>Tract</u>	<u>Acres</u>
04S	32E	13		NESW	39		SESW	25						

SWSE 29

SESE 29

Total Acres: 122

Conditions of Approval:

1. C18 THIS PARTIAL DECREE IS SUBJECT TO SUCH GENERAL PROVISIONS NECESSARY FOR THE DEFINITION OF THE RIGHTS OR FOR THE EFFICIENT ADMINISTRATION OF THE WATER RIGHTS AS MAY BE ULTIMATELY DETERMINED BY THE COURT AT A POINT IN TIME NO LATER THAN THE ENTRY OF A FINAL UNIFIED DECREE. SECTION 42-1412(6), IDAHO CODE.
2. C05 RIGHT INCLUDES ACCOMPLISHED CHANGE IN PLACE OF USE PURSUANT TO SECTION 42-1425, IDAHO CODE.
3. E02 USE OF THIS RIGHT IS COMBINED WITH WATER FROM ABERDEEN SPRINGFIELD CANAL CO.

Dates:

Licensed Date:

Decreed Date: 01/31/2002

Permit Proof Due Date:

Permit Proof Made Date:

Permit Approved Date:

Permit Moratorium Expiration Date:

Enlargement Use Priority Date:

Enlargement Statute Priority Date:

Water Supply Bank Enrollment Date Accepted:

Water Supply Bank Enrollment Date Removed:

Application Received Date:

Protest Deadline Date:

Number of Protests: 0

Other Information:

State or Federal: S

Owner Name Connector: OR

Water District Number: 120

Generic Max Rate per Acre:

Generic Max Volume per Acre:

Civil Case Number:

Old Case Number:

Decree Plaintiff:

Decree Defendant:

Swan Falls Trust or Nontrust:

Swan Falls Dismissed:

DLE Act Number:

Cary Act Number:

Mitigation Plan: False

IDAHO DEPARTMENT OF WATER RESOURCES
Water Right Report

11/20/2017

WATER RIGHT NO. 35-14140

<u>Owner Type</u>	<u>Name and Address</u>
Current Owner	HOUGHLAND FARMS INC 1842 W 800 S PINGREE, ID 83262-1253 2083282245
Original Owner	AETNA LIFE INSURANCE CO 151 FARMINGTON AVE HARTFORD, CT 06156

Priority Date: 04/08/1970

Basis: Decreed

Status: Active

<u>Source</u>	<u>Tributary</u>
GROUND WATER	

<u>Beneficial Use</u>	<u>From</u>	<u>To</u>	<u>Diversion Rate</u>	<u>Volume</u>
IRRIGATION	04/15	10/01	4.11 CFS	977.6 AFA
Total Diversion			4.11 CFS	

Location of Point(s) of Diversion:

GROUND WATER|NESWNE|Sec. 30|Township 04S|Range 33E|BINGHAM County

Place(s) of use:

Place of Use Legal Description: IRRIGATION BINGHAM County

<u>Township</u>	<u>Range</u>	<u>Section</u>	<u>Lot</u>	<u>Tract</u>	<u>Acres</u>	<u>Lot</u>	<u>Tract</u>	<u>Acres</u>	<u>Lot</u>	<u>Tract</u>	<u>Acres</u>	<u>Lot</u>	<u>Tract</u>	<u>Acres</u>
04S	33E	19		SWSE	28.1		SESE	27						

30	NENE 26.9	NWNE 28.8	SWNE 33	SENE 34
	NESE 34	NWSE 32.6		

Total Acres: 244.4

Conditions of Approval:

1. X61 The period of use for the irrigation described in this approval may be extended to a beginning date of 4/1 and an ending date of 10/31 provided that beneficial use of the water can be shown and other elements of the right are not exceeded. The use of water before 4/15 and after 10/1 is subordinate to all water rights having no subordinated early or late irrigation use and a priority date earlier than 01/31/2002
2. T19 Pursuant to Section 42-1412(6), Idaho Code, this water right is subject to such general provisions necessary for the definition of the rights or for the efficient administration of water rights as may be determined by the Snake River Basin Adjudication court at a point in time no later than the entry of the final unified decree.

Dates:

Licensed Date:

Decreed Date: 01/31/2002

Enlargement Use Priority Date:

Enlargement Statute Priority Date:

Water Supply Bank Enrollment Date Accepted:

Water Supply Bank Enrollment Date Removed:

Application Received Date:

Protest Deadline Date:

Number of Protests: 0

Other Information:

State or Federal: S

Owner Name Connector: Or

Water District Number: 120

Generic Max Rate per Acre: 0.02

Generic Max Volume per Acre: 4

Civil Case Number:

Old Case Number:

Decree Plaintiff:

Decree Defendant:

Swan Falls Trust or Nontrust:

Swan Falls Dismissed:

DLE Act Number:

Cary Act Number:

Mitigation Plan: False

Close

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

APPLICATION FOR TRANSFER OF WATER RIGHT

PART 3

A. PLAT MAP (See Part 3A of Instructions for application for transfer for complete requirements.)

- ☒ Attach a map of the diversion, measurement, control, and distribution system. Label it **Attachment #7a**.
- ☒ If the transfer application proposes to change the place or purpose of use of an irrigation right attach a Geographic Information System ([GIS](#)) shape file, or an aerial photo or other image clearly delineating the location and extent of existing acres and changes to the place of use. Label it **Attachment #7b**.

If the place of use currently consists of a permissible place of use, then the attachment is not required if the application contains a clear statement that the boundaries for the place of use are not proposed to be changed by the transfer and the total number of irrigated acres within the place of use before and after the transfer is clearly stated.

If any part of the irrigation water right is leased to the Water Supply Bank, you must also specify the location and number of acres that will remain idled for the duration of the lease contract at the new, proposed place of use.

B. CHANGES IN NATURE OF USE (Water Balance)

- ☐ If you propose to change the nature of use or period of use of all or part of the right(s) listed in this application, attach documentation describing the extent of historic beneficial use of the portion of the right(s) proposed to be changed. Also attach documentation showing that the portion of the right(s) to be changed will not be enlarged in rate, volume, or consumptive use through the proposed change. Label it **Attachment #8a**.

C. PLACE OF USE CHANGES TO SUPPLEMENTAL IRRIGATION RIGHTS

- ☐ If you propose to change the place of use of a supplemental irrigation right, answer below and attach supporting documentation. Label it **Attachment #8b**.

Describe how the supplemental water rights have been used historically in conjunction with other water rights at the existing place of use. Describe the time during the irrigation season that the supplemental rights have been used. Include information about the availability or reliability of the primary right(s) being supplemented, both before and after the change. If the applicant is proposing to change a supplemental irrigation right to a primary right, provide the information required on Part 3B above:

This image shows a single sheet of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page. There are approximately 20 lines visible. The paper appears to be a standard notebook page.

FOR DEPARTMENT USE ONLY

Transfer contains _____ pages and _____ attachments.

Received by SC Date 11/28/17 Preliminary check by _____ Date _____
 Fee paid 580⁰⁰ Date 11/28/17 Received by SC Receipt # 4043575
 Add'l fee paid _____ Date _____ Received by _____ Receipt # _____

Check all that apply: Attachment WSB ☐ (copy sent to state office) Lessor Designation form ☐ &/or W-9 ☐ (originals to state office)

Attachment No. 5

ESPA Analysis and Mitigation Plan

ATTACHMENT 5.1

Water Modeling – Data Entry

ENHANCED GROUND-WATER RIGHTS TRANSFER

UNIVERSITY OF IDAHO - IDAHO WATER RESOURCES RESEARCH INSTITUTE

IDAHO DEPARTMENT OF AGRICULTURE

Cells this color are
set up for user entries

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

TRANSFER NO:

YEAR

1970

TRANSFER NAME

SEASON

SPRING

ENTER CELL LOCATIONS:

	'TO' CELL	'FROM1' CELL	'FROM2' CELL	'FROM3' CELL
ROW	82	84		
COLUMN	119	119		

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 1970	0	-19	49	0	0	0	0
SUM 1970	0	-19	49	0	0	0	0
WIN 1970	0	-19	49	0	0	0	0
SPR 1971	0	-19	49	0	0	0	0
SUM 1971	0	-19	49	0	0	0	0
WIN 1971	0	-19	49	0	0	0	0
SPR 1972	0	-19	49	0	0	0	0
SUM 1972	0	-19	49	0	0	0	0
WIN 1972	0	-19	49	0	0	0	0
SPR 1973	0	-19	49	0	0	0	0
SUM 1973	0	-19	49	0	0	0	0
WIN 1973	0	-19	49	0	0	0	0
SPR 1974	0	-19	49	0	0	0	0
SUM 1974	0	-19	49	0	0	0	0
WIN 1974	0	-19	49	0	0	0	0
SPR 1975	0	-19	49	0	0	0	0
SUM 1975	0	-19	49	0	0	0	0
WIN 1975	0	-19	49	0	0	0	0
SPR 1976	0	-19	49	0	0	0	0
SUM 1976	0	-19	49	0	0	0	0
WIN 1976	0	-19	49	0	0	0	0
SPR 1977	0	-19	49	0	0	0	0
SUM 1977	0	-19	49	0	0	0	0
WIN 1977	0	-19	49	0	0	0	0
SPR 1978	0	-19	49	0	0	0	0
SUM 1978	0	-19	49	0	0	0	0
WIN 1978	0	-19	49	0	0	0	0
SPR 1979	0	-19	49	0	0	0	0
SUM 1979	0	-19	49	0	0	0	0
WIN 1979	0	-19	49	0	0	0	0
SPR 1980	0	-19	49	0	0	0	0
SUM 1980	0	-19	49	0	0	0	0
WIN 1980	0	-19	49	0	0	0	0
SPR 1981	0	-19	49	0	0	0	0
SUM 1981	0	-19	49	0	0	0	0
WIN 1981	0	-19	49	0	0	0	0
SPR 1982	0	-19	49	0	0	0	0
SUM 1982	0	-19	49	0	0	0	0
WIN 1982	0	-19	49	0	0	0	0

SPR 1983	0	.49	.49	0	0	0	0
SUM 1983	0	.49	.49	0	0	0	0
WIN 1983	0	.49	.49	0	0	0	0
SPR 1984	0	.49	.49	0	0	0	0
SUM 1984	0	.49	.49	0	0	0	0
WIN 1984	0	.49	.49	0	0	0	0
SPR 1985	0	.49	.49	0	0	0	0
SUM 1985	0	.49	.49	0	0	0	0
WIN 1985	0	.49	.49	0	0	0	0
SPR 1986	0	.49	.49	0	0	0	0
SUM 1986	0	.49	.49	0	0	0	0
WIN 1986	0	.49	.49	0	0	0	0
SPR 1987	0	.49	.49	0	0	0	0
SUM 1987	0	.49	.49	0	0	0	0
WIN 1987	0	.49	.49	0	0	0	0
SPR 1988	0	.49	.49	0	0	0	0
SUM 1988	0	.49	.49	0	0	0	0
WIN 1988	0	.49	.49	0	0	0	0
SPR 1989	0	.49	.49	0	0	0	0
SUM 1989	0	.49	.49	0	0	0	0
WIN 1989	0	.49	.49	0	0	0	0
SPR 1990	0	.49	.49	0	0	0	0
SUM 1990	0	.49	.49	0	0	0	0
WIN 1990	0	.49	.49	0	0	0	0
SPR 1991	0	.49	.49	0	0	0	0
SUM 1991	0	.49	.49	0	0	0	0
WIN 1991	0	.49	.49	0	0	0	0
SPR 1992	0	.49	.49	0	0	0	0
SUM 1992	0	.49	.49	0	0	0	0
WIN 1992	0	.49	.49	0	0	0	0
SPR 1993	0	.49	.49	0	0	0	0
SUM 1993	0	.49	.49	0	0	0	0
WIN 1993	0	.49	.49	0	0	0	0
SPR 1994	0	.49	.49	0	0	0	0
SUM 1994	0	.49	.49	0	0	0	0
WIN 1994	0	.49	.49	0	0	0	0
SPR 1995	0	.49	.49	0	0	0	0
SUM 1995	0	.49	.49	0	0	0	0
WIN 1995	0	.49	.49	0	0	0	0
SPR 1996	0	.49	.49	0	0	0	0
SUM 1996	0	.49	.49	0	0	0	0
WIN 1996	0	.49	.49	0	0	0	0
SPR 1997	0	.49	.49	0	0	0	0
SUM 1997	0	.49	.49	0	0	0	0
WIN 1997	0	.49	.49	0	0	0	0
SPR 1998	0	.49	.49	0	0	0	0
SUM 1998	0	.49	.49	0	0	0	0
WIN 1998	0	.49	.49	0	0	0	0
SPR 1999	0	.49	.49	0	0	0	0
SUM 1999	0	.49	.49	0	0	0	0
WIN 1999	0	.49	.49	0	0	0	0
SPR 2000	0	.49	.49	0	0	0	0
SUM 2000	0	.49	.49	0	0	0	0
WIN 2000	0	.49	.49	0	0	0	0
SPR 2001	0	.49	.49	0	0	0	0
SUM 2001	0	.49	.49	0	0	0	0
WIN 2001	0	.49	.49	0	0	0	0
SPR 2002	0	.49	.49	0	0	0	0
SUM 2002	0	.49	.49	0	0	0	0
WIN 2002	0	.49	.49	0	0	0	0
SPR 2003	0	.49	.49	0	0	0	0
SUM 2003	0	.49	.49	0	0	0	0
WIN 2003	0	.49	.49	0	0	0	0
SPR 2004	0	.49	.49	0	0	0	0
SUM 2004	0	.49	.49	0	0	0	0
WIN 2004	0	.49	.49	0	0	0	0
SPR 2005	0	.49	.49	0	0	0	0
SUM 2005	0	.49	.49	0	0	0	0
WIN 2005	0	.49	.49	0	0	0	0
SPR 2006	0	.49	.49	0	0	0	0
SUM 2006	0	.49	.49	0	0	0	0

WIN 2006	0	49	49	0	0	0	0
SPR 2007	0	49	49	0	0	0	0
SUM 2007	0	49	49	0	0	0	0
WIN 2007	0	49	49	0	0	0	0
SPR 2008	0	49	49	0	0	0	0
SUM 2008	0	49	49	0	0	0	0
WIN 2008	0	49	49	0	0	0	0
SPR 2009	0	49	49	0	0	0	0
SUM 2009	0	49	49	0	0	0	0
WIN 2009	0	49	49	0	0	0	0
SPR 2010	0	49	49	0	0	0	0
SUM 2010	0	49	49	0	0	0	0
WIN 2010	0	49	49	0	0	0	0
SPR 2011	0	49	49	0	0	0	0
SUM 2011	0	49	49	0	0	0	0
WIN 2011	0	49	49	0	0	0	0
SPR 2012	0	49	49	0	0	0	0
SUM 2012	0	49	49	0	0	0	0
WIN 2012	0	49	49	0	0	0	0
SPR 2013	0	49	49	0	0	0	0
SUM 2013	0	49	49	0	0	0	0
WIN 2013	0	49	49	0	0	0	0
SPR 2014	0	49	49	0	0	0	0
SUM 2014	0	49	49	0	0	0	0
WIN 2014	0	49	49	0	0	0	0
SPR 2015	0	49	49	0	0	0	0
SUM 2015	0	49	49	0	0	0	0
WIN 2015	0	49	49	0	0	0	0
SPR 2016	0	49	49	0	0	0	0
SUM 2016	0	49	49	0	0	0	0
WIN 2016	0	49	49	0	0	0	0
SPR 2017	0	49	49	0	0	0	0
SUM 2017	0	49	49	0	0	0	0
WIN 2017	0	49	49	0	0	0	0
SPR 2018	49	0	49	0	0	0	0
SUM 2018	49	0	49	0	0	0	0
WIN 2018	49	0	49	0	0	0	0
SPR 2019	49	0	49	0	0	0	0
SUM 2019	49	0	49	0	0	0	0
WIN 2019	49	0	49	0	0	0	0
SPR 2020	49	0	49	0	0	0	0
SUM 2020	49	0	49	0	0	0	0
WIN 2020	49	0	49	0	0	0	0
SPR 2021	49	0	49	0	0	0	0
SUM 2021	49	0	49	0	0	0	0
WIN 2021	49	0	49	0	0	0	0
SPR 2022	49	0	49	0	0	0	0
SUM 2022	49	0	49	0	0	0	0
WIN 2022	49	0	49	0	0	0	0
SPR 2023	49	0	49	0	0	0	0
SUM 2023	49	0	49	0	0	0	0
WIN 2023	49	0	49	0	0	0	0
SPR 2024	49	0	49	0	0	0	0
SUM 2024	49	0	49	0	0	0	0
WIN 2024	49	0	49	0	0	0	0
SPR 2025	49	0	49	0	0	0	0
SUM 2025	49	0	49	0	0	0	0
WIN 2025	49	0	49	0	0	0	0
SPR 2026	49	0	49	0	0	0	0
SUM 2026	49	0	49	0	0	0	0
WIN 2026	49	0	49	0	0	0	0
SPR 2027	49	0	49	0	0	0	0
SUM 2027	49	0	49	0	0	0	0
WIN 2027	49	0	49	0	0	0	0
SPR 2028	49	0	49	0	0	0	0
SUM 2028	49	0	49	0	0	0	0
WIN 2028	49	0	49	0	0	0	0
SPR 2029	49	0	49	0	0	0	0
SUM 2029	49	0	49	0	0	0	0
WIN 2029	49	0	49	0	0	0	0
SPR 2030	49	0	49	0	0	0	0
SUM 2030	49	0	49	0	0	0	0

WIN 2030	.49	0	.49	0	0	0	0
SPR 2031	.49	0	.49	0	0	0	0
SUM 2031	.49	0	.49	0	0	0	0
WIN 2031	.49	0	.49	0	0	0	0
SPR 2032	.49	0	.49	0	0	0	0
SUM 2032	.49	0	.49	0	0	0	0
WIN 2032	.49	0	.49	0	0	0	0
SPR 2033	.49	0	.49	0	0	0	0
SUM 2033	.49	0	.49	0	0	0	0
WIN 2033	.49	0	.49	0	0	0	0
SPR 2034	.49	0	.49	0	0	0	0
SUM 2034	.49	0	.49	0	0	0	0
WIN 2034	.49	0	.49	0	0	0	0
SPR 2035	.49	0	.49	0	0	0	0
SUM 2035	.49	0	.49	0	0	0	0
WIN 2035	.49	0	.49	0	0	0	0
SPR 2036	.49	0	.49	0	0	0	0
SUM 2036	.49	0	.49	0	0	0	0
WIN 2036	.49	0	.49	0	0	0	0
SPR 2037	.49	0	.49	0	0	0	0
SUM 2037	.49	0	.49	0	0	0	0
WIN 2037	.49	0	.49	0	0	0	0
SPR 2038	.49	0	.49	0	0	0	0
SUM 2038	.49	0	.49	0	0	0	0
WIN 2038	.49	0	.49	0	0	0	0
SPR 2039	.49	0	.49	0	0	0	0
SUM 2039	.49	0	.49	0	0	0	0
WIN 2039	.49	0	.49	0	0	0	0
SPR 2040	.49	0	.49	0	0	0	0
SUM 2040	.49	0	.49	0	0	0	0
WIN 2040	.49	0	.49	0	0	0	0
SPR 2041	.49	0	.49	0	0	0	0
SUM 2041	.49	0	.49	0	0	0	0
WIN 2041	.49	0	.49	0	0	0	0
SPR 2042	.49	0	.49	0	0	0	0
SUM 2042	.49	0	.49	0	0	0	0
WIN 2042	.49	0	.49	0	0	0	0
SPR 2043	.49	0	.49	0	0	0	0
SUM 2043	.49	0	.49	0	0	0	0
WIN 2043	.49	0	.49	0	0	0	0
SPR 2044	.49	0	.49	0	0	0	0
SUM 2044	.49	0	.49	0	0	0	0
WIN 2044	.49	0	.49	0	0	0	0
SPR 2045	.49	0	.49	0	0	0	0
SUM 2045	.49	0	.49	0	0	0	0
WIN 2045	.49	0	.49	0	0	0	0
SPR 2046	.49	0	.49	0	0	0	0
SUM 2046	.49	0	.49	0	0	0	0
WIN 2046	.49	0	.49	0	0	0	0
SPR 2047	.49	0	.49	0	0	0	0
SUM 2047	.49	0	.49	0	0	0	0
WIN 2047	.49	0	.49	0	0	0	0
SPR 2048	.49	0	.49	0	0	0	0
SUM 2048	.49	0	.49	0	0	0	0
WIN 2048	.49	0	.49	0	0	0	0
SPR 2049	.49	0	.49	0	0	0	0
SUM 2049	.49	0	.49	0	0	0	0
WIN 2049	.49	0	.49	0	0	0	0
SPR 2050	.49	0	.49	0	0	0	0
SUM 2050	.49	0	.49	0	0	0	0
WIN 2050	.49	0	.49	0	0	0	0
SPR 2051	.49	0	.49	0	0	0	0
SUM 2051	.49	0	.49	0	0	0	0
WIN 2051	.49	0	.49	0	0	0	0
SPR 2052	.49	0	.49	0	0	0	0
SUM 2052	.49	0	.49	0	0	0	0
WIN 2052	.49	0	.49	0	0	0	0
SPR 2053	.49	0	.49	0	0	0	0
SUM 2053	.49	0	.49	0	0	0	0
WIN 2053	.49	0	.49	0	0	0	0
SPR 2054	.49	0	.49	0	0	0	0
SUM 2054	.49	0	.49	0	0	0	0

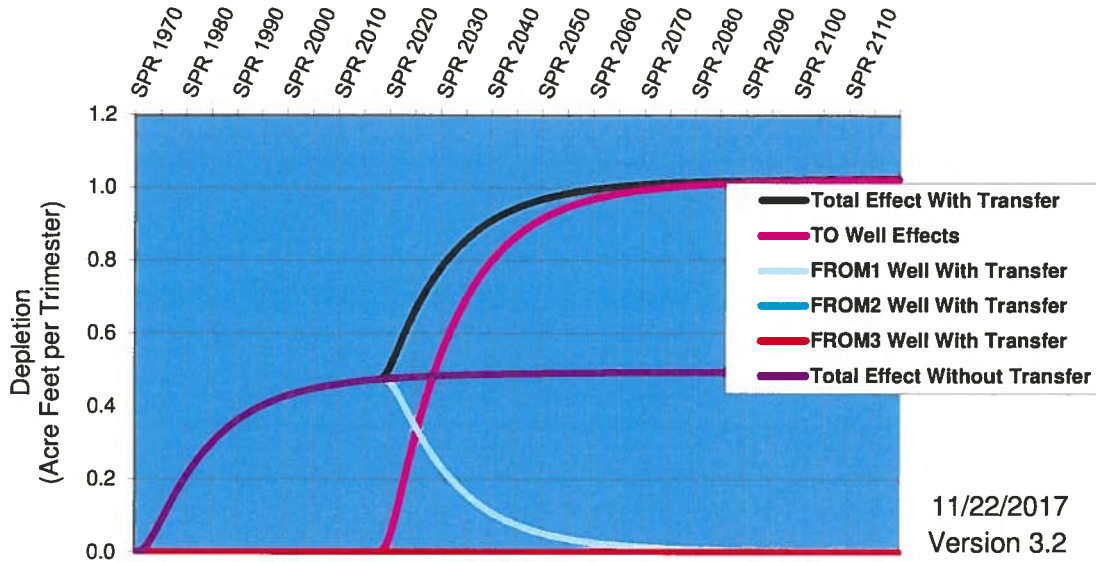
WIN 2054	49	0	49	0	0	0	0
SPR 2055	49	0	49	0	0	0	0
SUM 2055	49	0	49	0	0	0	0
WIN 2055	49	0	49	0	0	0	0
SPR 2056	49	0	49	0	0	0	0
SUM 2056	49	0	49	0	0	0	0
WIN 2056	49	0	49	0	0	0	0
SPR 2057	49	0	49	0	0	0	0
SUM 2057	49	0	49	0	0	0	0
WIN 2057	49	0	49	0	0	0	0
SPR 2058	49	0	49	0	0	0	0
SUM 2058	49	0	49	0	0	0	0
WIN 2058	49	0	49	0	0	0	0
SPR 2059	49	0	49	0	0	0	0
SUM 2059	49	0	49	0	0	0	0
WIN 2059	49	0	49	0	0	0	0
SPR 2060	49	0	49	0	0	0	0
SUM 2060	49	0	49	0	0	0	0
WIN 2060	49	0	49	0	0	0	0
SPR 2061	49	0	49	0	0	0	0
SUM 2061	49	0	49	0	0	0	0
WIN 2061	49	0	49	0	0	0	0
SPR 2062	49	0	49	0	0	0	0
SUM 2062	49	0	49	0	0	0	0
WIN 2062	49	0	49	0	0	0	0
SPR 2063	49	0	49	0	0	0	0
SUM 2063	49	0	49	0	0	0	0
WIN 2063	49	0	49	0	0	0	0
SPR 2064	49	0	49	0	0	0	0
SUM 2064	49	0	49	0	0	0	0
WIN 2064	49	0	49	0	0	0	0
SPR 2065	49	0	49	0	0	0	0
SUM 2065	49	0	49	0	0	0	0
WIN 2065	49	0	49	0	0	0	0
SPR 2066	49	0	49	0	0	0	0
SUM 2066	49	0	49	0	0	0	0
WIN 2066	49	0	49	0	0	0	0
SPR 2067	49	0	49	0	0	0	0
SUM 2067	49	0	49	0	0	0	0
WIN 2067	49	0	49	0	0	0	0
SPR 2068	49	0	49	0	0	0	0
SUM 2068	49	0	49	0	0	0	0
WIN 2068	49	0	49	0	0	0	0
SPR 2069	49	0	49	0	0	0	0
SUM 2069	49	0	49	0	0	0	0
WIN 2069	49	0	49	0	0	0	0
SPR 2070	49	0	49	0	0	0	0
SUM 2070	49	0	49	0	0	0	0
WIN 2070	49	0	49	0	0	0	0
SPR 2071	49	0	49	0	0	0	0
SUM 2071	49	0	49	0	0	0	0
WIN 2071	49	0	49	0	0	0	0
SPR 2072	49	0	49	0	0	0	0
SUM 2072	49	0	49	0	0	0	0
WIN 2072	49	0	49	0	0	0	0
SPR 2073	49	0	49	0	0	0	0
SUM 2073	49	0	49	0	0	0	0
WIN 2073	49	0	49	0	0	0	0
SPR 2074	49	0	49	0	0	0	0
SUM 2074	49	0	49	0	0	0	0
WIN 2074	49	0	49	0	0	0	0
SPR 2075	49	0	49	0	0	0	0
SUM 2075	49	0	49	0	0	0	0
WIN 2075	49	0	49	0	0	0	0
SPR 2076	49	0	49	0	0	0	0
SUM 2076	49	0	49	0	0	0	0
WIN 2076	49	0	49	0	0	0	0
SPR 2077	49	0	49	0	0	0	0
SUM 2077	49	0	49	0	0	0	0
WIN 2077	49	0	49	0	0	0	0
SPR 2078	49	0	49	0	0	0	0
SUM 2078	49	0	49	0	0	0	0

WIN 2078	49	0	49	0	0	0	0
SPR 2079	49	0	49	0	0	0	0
SUM 2079	49	0	49	0	0	0	0
WIN 2079	49	0	49	0	0	0	0
SPR 2080	49	0	49	0	0	0	0
SUM 2080	49	0	49	0	0	0	0
WIN 2080	49	0	49	0	0	0	0
SPR 2081	49	0	49	0	0	0	0
SUM 2081	49	0	49	0	0	0	0
WIN 2081	49	0	49	0	0	0	0
SPR 2082	49	0	49	0	0	0	0
SUM 2082	49	0	49	0	0	0	0
WIN 2082	49	0	49	0	0	0	0
SPR 2083	49	0	49	0	0	0	0
SUM 2083	49	0	49	0	0	0	0
WIN 2083	49	0	49	0	0	0	0
SPR 2084	49	0	49	0	0	0	0
SUM 2084	49	0	49	0	0	0	0
WIN 2084	49	0	49	0	0	0	0
SPR 2085	49	0	49	0	0	0	0
SUM 2085	49	0	49	0	0	0	0
WIN 2085	49	0	49	0	0	0	0
SPR 2086	49	0	49	0	0	0	0
SUM 2086	49	0	49	0	0	0	0
WIN 2086	49	0	49	0	0	0	0
SPR 2087	49	0	49	0	0	0	0
SUM 2087	49	0	49	0	0	0	0
WIN 2087	49	0	49	0	0	0	0
SPR 2088	49	0	49	0	0	0	0
SUM 2088	49	0	49	0	0	0	0
WIN 2088	49	0	49	0	0	0	0
SPR 2089	49	0	49	0	0	0	0
SUM 2089	49	0	49	0	0	0	0
WIN 2089	49	0	49	0	0	0	0
SPR 2090	49	0	49	0	0	0	0
SUM 2090	49	0	49	0	0	0	0
WIN 2090	49	0	49	0	0	0	0
SPR 2091	49	0	49	0	0	0	0
SUM 2091	49	0	49	0	0	0	0
WIN 2091	49	0	49	0	0	0	0
SPR 2092	49	0	49	0	0	0	0
SUM 2092	49	0	49	0	0	0	0
WIN 2092	49	0	49	0	0	0	0
SPR 2093	49	0	49	0	0	0	0
SUM 2093	49	0	49	0	0	0	0
WIN 2093	49	0	49	0	0	0	0
SPR 2094	49	0	49	0	0	0	0
SUM 2094	49	0	49	0	0	0	0
WIN 2094	49	0	49	0	0	0	0
SPR 2095	49	0	49	0	0	0	0
SUM 2095	49	0	49	0	0	0	0
WIN 2095	49	0	49	0	0	0	0
SPR 2096	49	0	49	0	0	0	0
SUM 2096	49	0	49	0	0	0	0
WIN 2096	49	0	49	0	0	0	0
SPR 2097	49	0	49	0	0	0	0
SUM 2097	49	0	49	0	0	0	0
WIN 2097	49	0	49	0	0	0	0
SPR 2098	49	0	49	0	0	0	0
SUM 2098	49	0	49	0	0	0	0
WIN 2098	49	0	49	0	0	0	0
SPR 2099	49	0	49	0	0	0	0
SUM 2099	49	0	49	0	0	0	0
WIN 2099	49	0	49	0	0	0	0
SPR 2100	49	0	49	0	0	0	0
SUM 2100	49	0	49	0	0	0	0
WIN 2100	49	0	49	0	0	0	0
SPR 2101	49	0	49	0	0	0	0
SUM 2101	49	0	49	0	0	0	0
WIN 2101	49	0	49	0	0	0	0
SPR 2102	49	0	49	0	0	0	0
SUM 2102	49	0	49	0	0	0	0

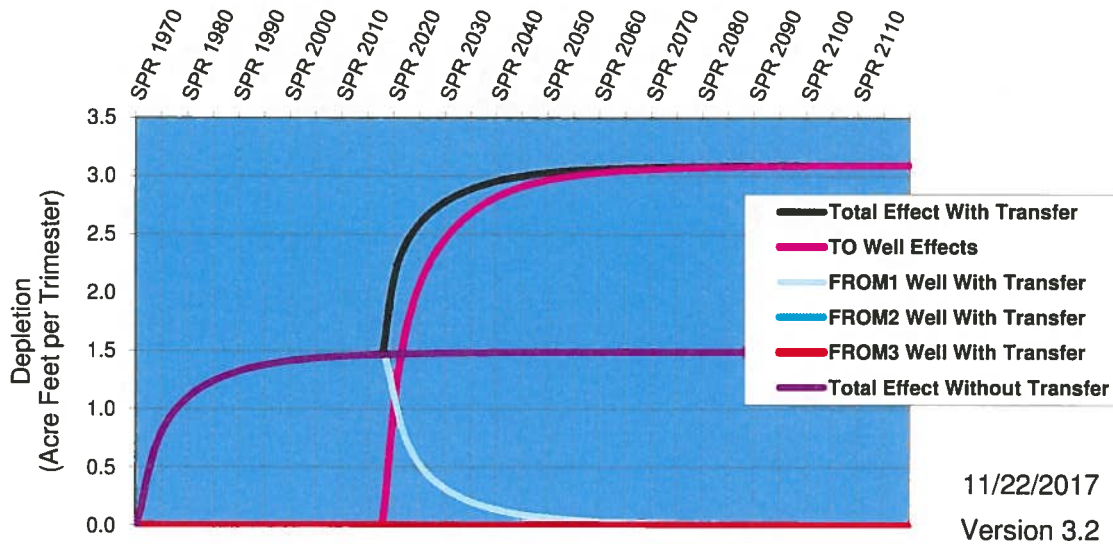
WIN 2102	49	0	49	0	0	0	0
SPR 2103	49	0	49	0	0	0	0
SUM 2103	49	0	49	0	0	0	0
WIN 2103	49	0	49	0	0	0	0
SPR 2104	49	0	49	0	0	0	0
SUM 2104	49	0	49	0	0	0	0
WIN 2104	49	0	49	0	0	0	0
SPR 2105	49	0	49	0	0	0	0
SUM 2105	49	0	49	0	0	0	0
WIN 2105	49	0	49	0	0	0	0
SPR 2106	49	0	49	0	0	0	0
SUM 2106	49	0	49	0	0	0	0
WIN 2106	49	0	49	0	0	0	0
SPR 2107	49	0	49	0	0	0	0
SUM 2107	49	0	49	0	0	0	0
WIN 2107	49	0	49	0	0	0	0
SPR 2108	49	0	49	0	0	0	0
SUM 2108	49	0	49	0	0	0	0
WIN 2108	49	0	49	0	0	0	0
SPR 2109	49	0	49	0	0	0	0
SUM 2109	49	0	49	0	0	0	0
WIN 2109	49	0	49	0	0	0	0
SPR 2110	49	0	49	0	0	0	0
SUM 2110	49	0	49	0	0	0	0
WIN 2110	49	0	49	0	0	0	0
SPR 2111	49	0	49	0	0	0	0
SUM 2111	49	0	49	0	0	0	0
WIN 2111	49	0	49	0	0	0	0
SPR 2112	49	0	49	0	0	0	0
SUM 2112	49	0	49	0	0	0	0
WIN 2112	49	0	49	0	0	0	0
SPR 2113	49	0	49	0	0	0	0
SUM 2113	49	0	49	0	0	0	0
WIN 2113	49	0	49	0	0	0	0
SPR 2114	49	0	49	0	0	0	0
SUM 2114	49	0	49	0	0	0	0
WIN 2114	49	0	49	0	0	0	0
SPR 2115	49	0	49	0	0	0	0
SUM 2115	49	0	49	0	0	0	0
WIN 2115	49	0	49	0	0	0	0
SPR 2116	49	0	49	0	0	0	0
SUM 2116	49	0	49	0	0	0	0
WIN 2116	49	0	49	0	0	0	0
SPR 2117	49	0	49	0	0	0	0
SUM 2117	49	0	49	0	0	0	0
WIN 2117	49	0	49	0	0	0	0
SPR 2118	49	0	49	0	0	0	0
SUM 2118	49	0	49	0	0	0	0
WIN 2118	49	0	49	0	0	0	0
SPR 2119	49	0	49	0	0	0	0
SUM 2119	49	0	49	0	0	0	0
WIN 2119	49	0	49	0	0	0	0

ATTACHMENT 5.2
Water Modeling – Graphs
above Milner

Hydrologic Response--Ashton to Rexburg
Customer Name: **Transfer No:**



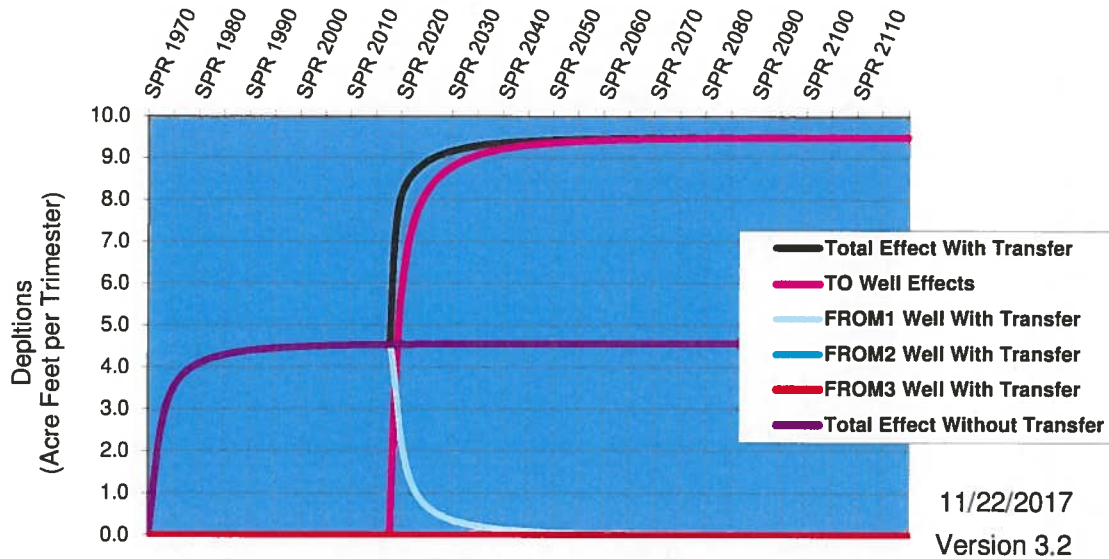
Hydrologic Response--Heise to Shelley
Customer Name: **Transfer No:**



Hydrologic Response--Shelley to Near Blackfoot

Customer Name:

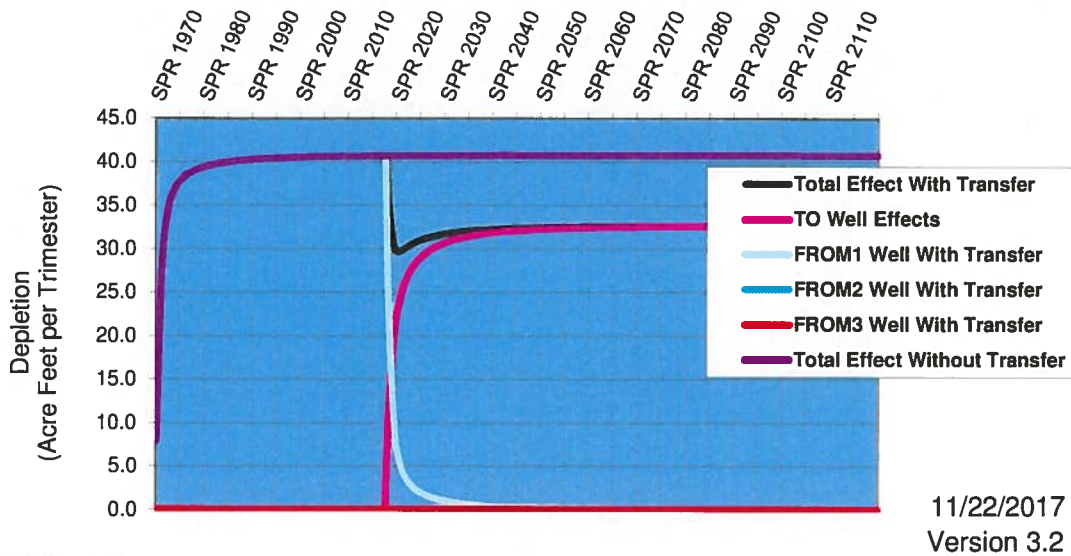
Transfer No:

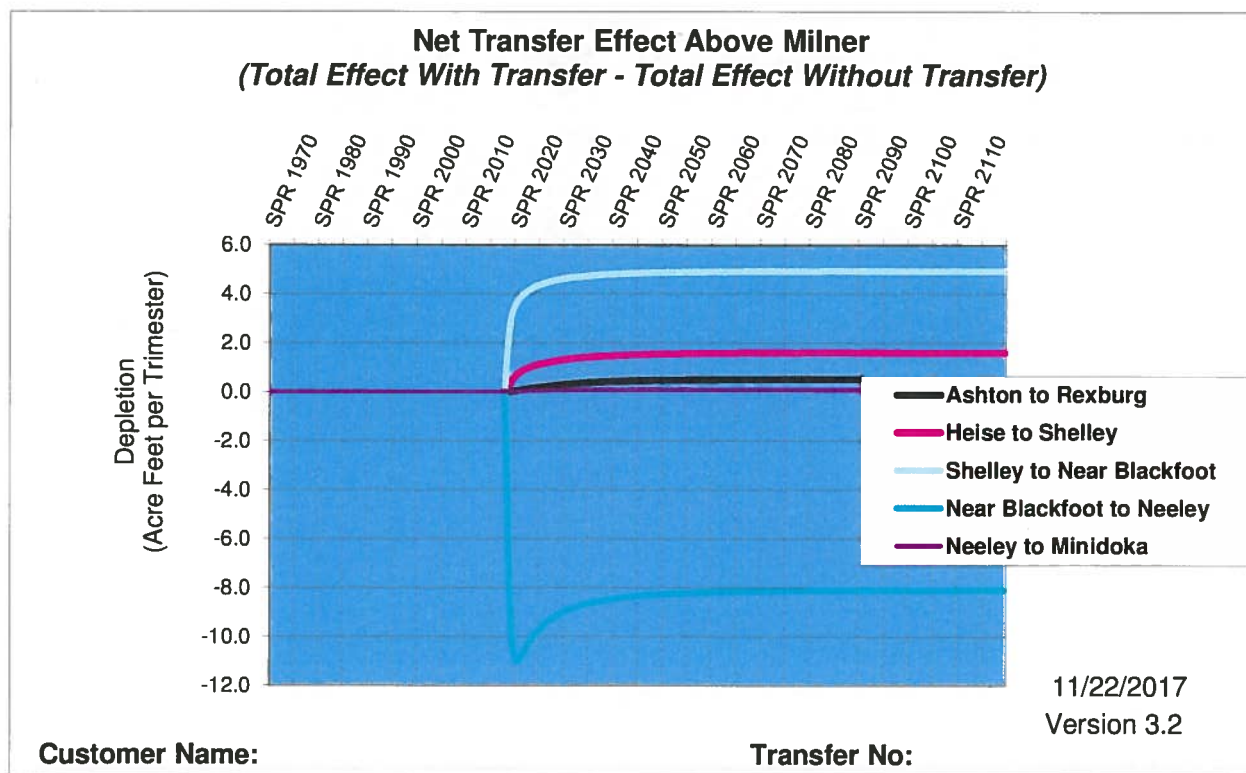
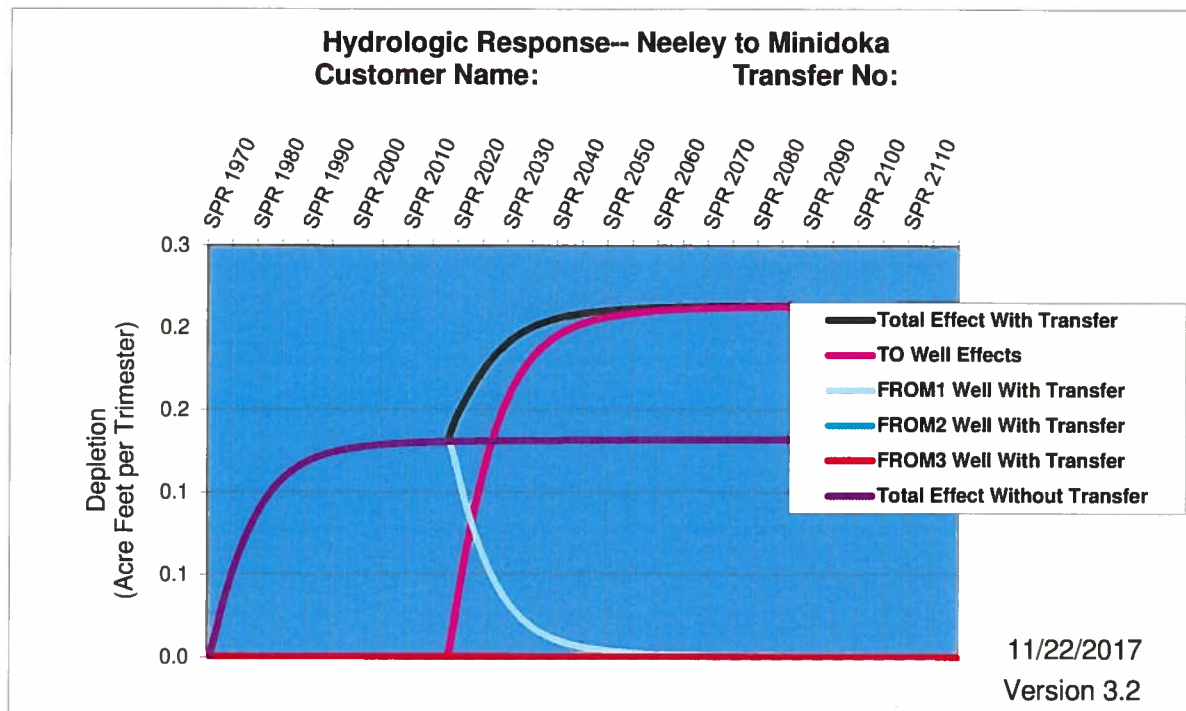


Hydrologic Response-- Near Blackfoot to Neeley

Customer Name:

Transfer No:



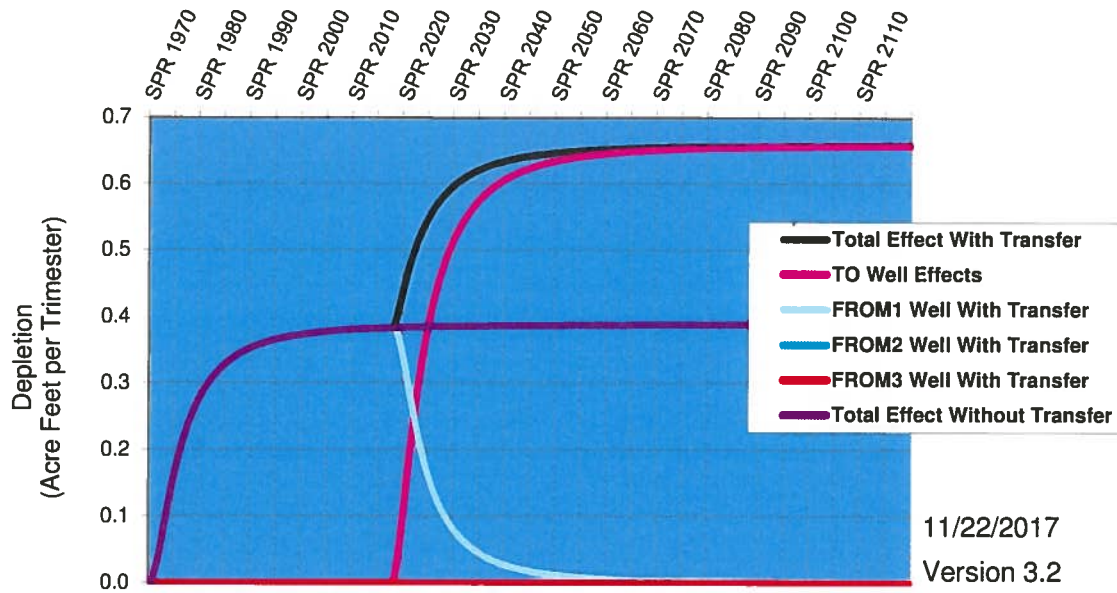


ATTACHMENT 5.3
Water Modeling – Graphs
below Milner

Hydrologic Response--Devil's Washbowl to Buhl

Customer Name:

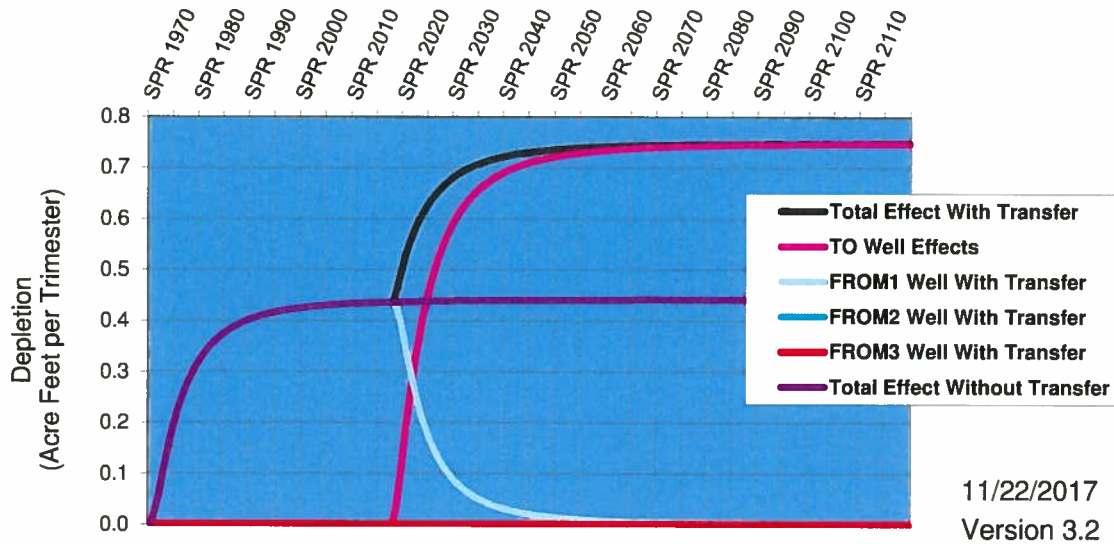
Transfer No:



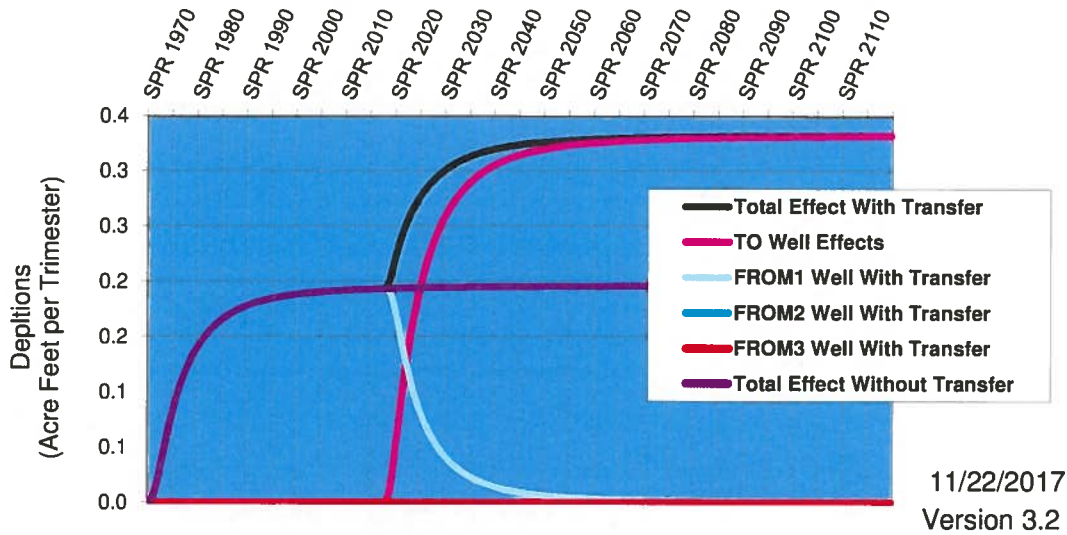
Hydrologic Response--Buhl to Thousand Springs

Customer Name:

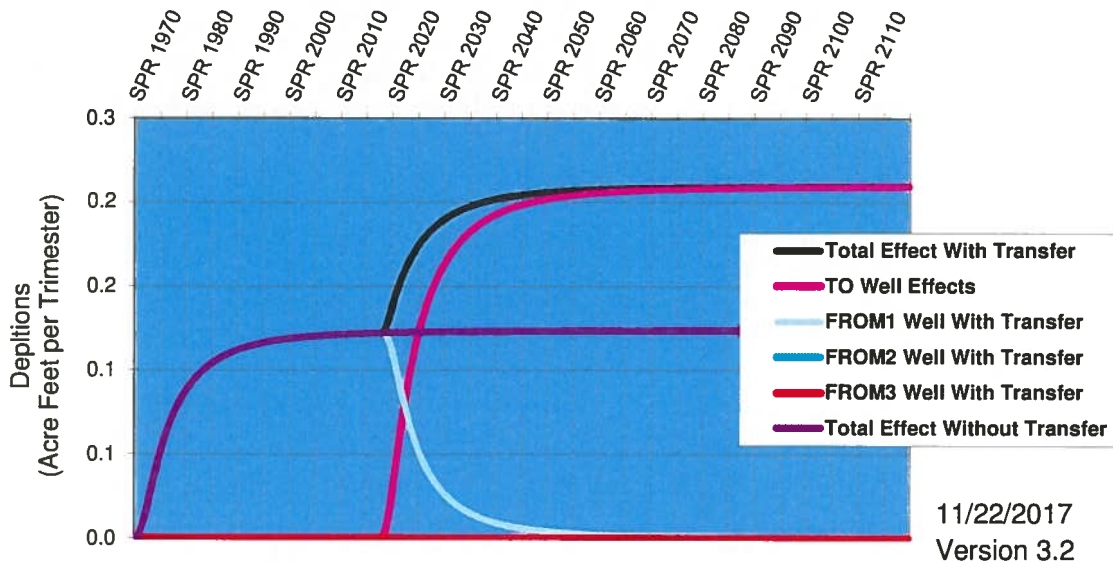
Transfer No:



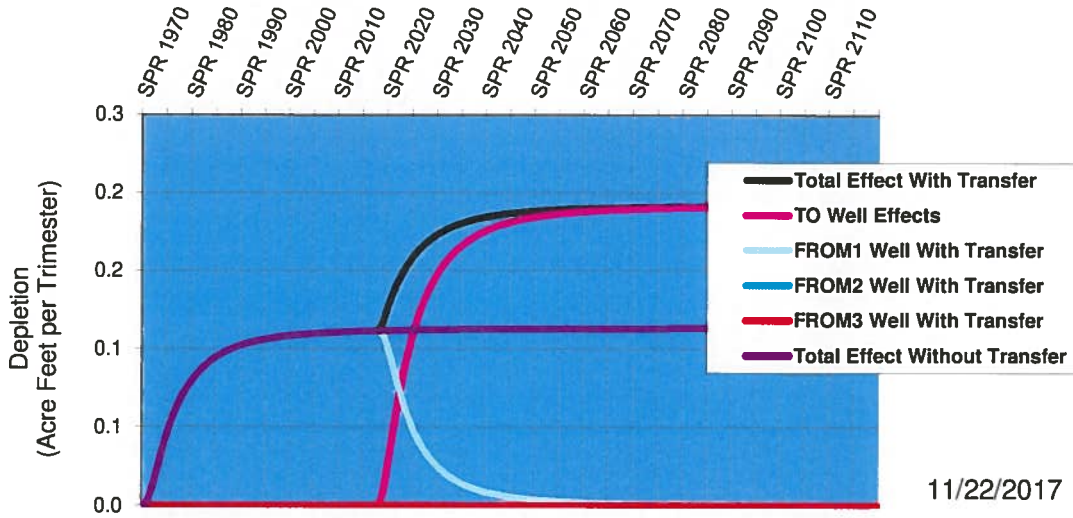
Hydrologic Response--Thousand Springs Customer Name: Transfer No:



Hydrologic Response--Thousand Springs to Malad Customer Name: Transfer No:



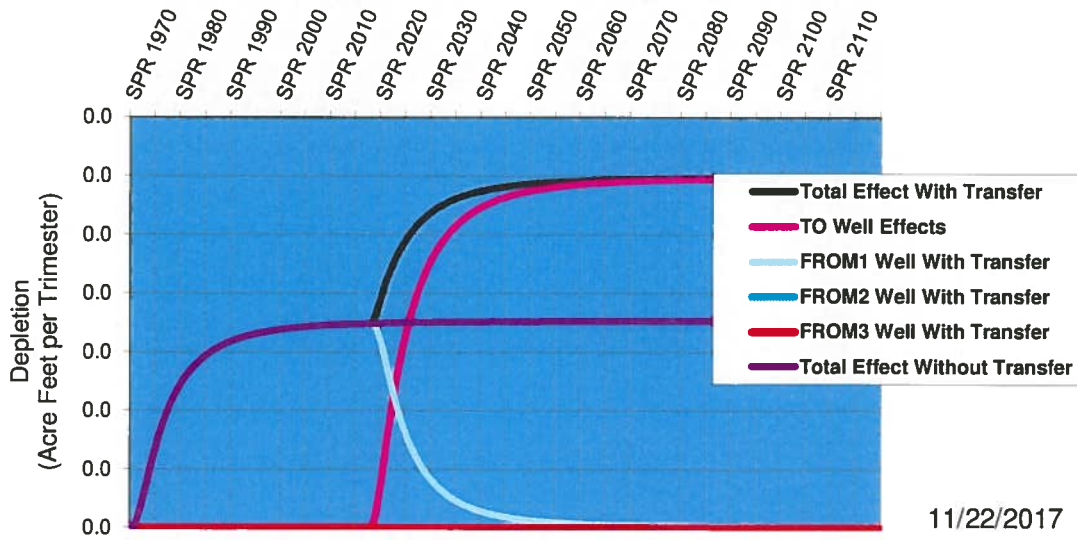
Hydrologic Response-- Malad
Customer Name: **Transfer No:**



11/22/2017

Version 3.2

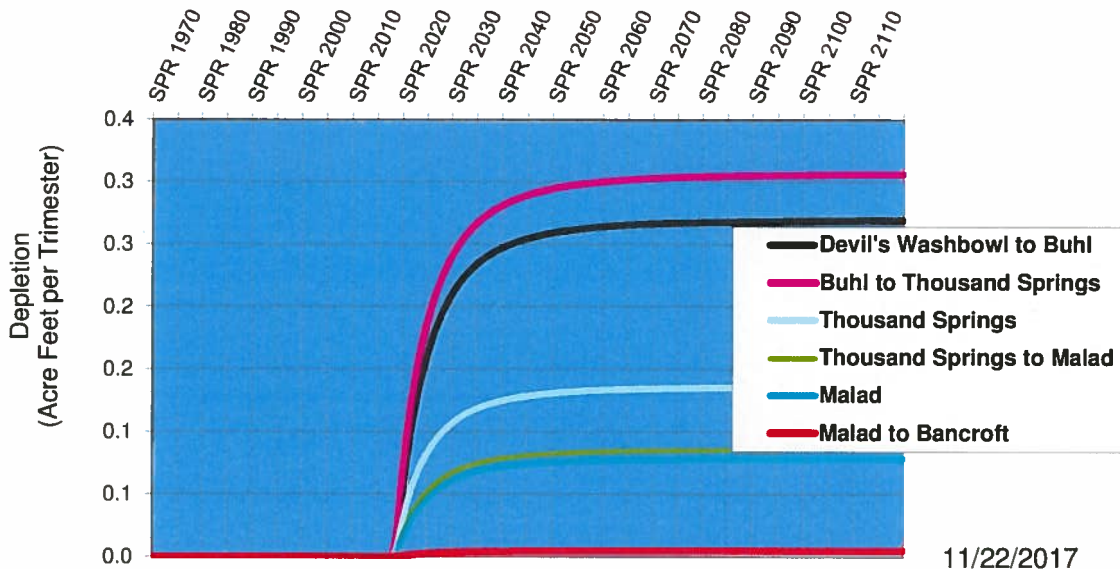
Hydrologic Response-- Malad to Bancroft
Customer Name: **Transfer No:**



11/22/2017

Version 3.2

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



11/22/2017
Version 3.2

Customer Name:

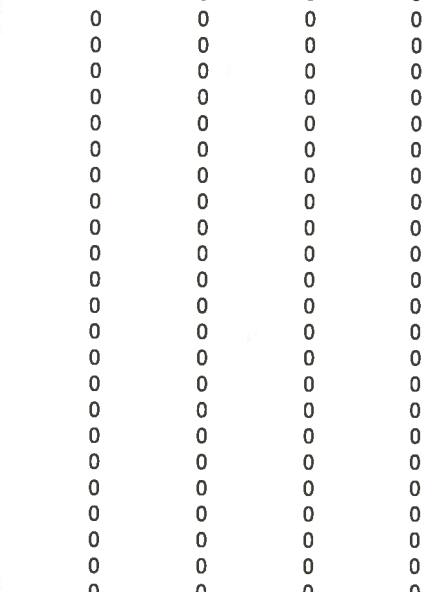
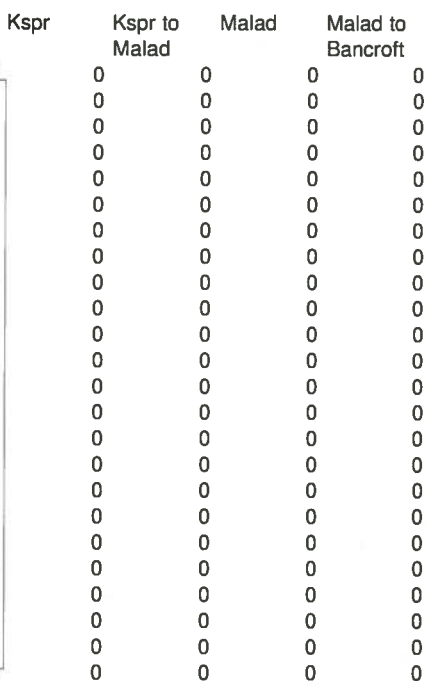
Transfer No:

ATTACHMENT 5.4

Water Modeling – Change Ratio

82067

period	Ashton to Rexburg	Heise to Shelley	Shelley to Nr Bickft	Nr Bickft to Neeley	Neeley to Minidoka	Dev. Wbl. to Buhl	Buhl to Kspr	Kspr	Kspr to Malad	Malad	Malad to Bancroft
--------	----------------------	---------------------	-------------------------	------------------------	-----------------------	----------------------	-----------------	------	------------------	-------	----------------------

[illegible]

ATTACHMENT 5.5

Water Modeling – Calculated Effects

82067

Enter First Time Step of Transfer: **SPR 2019**

Match: 145 Match: 456

	AR	HIS	SINB	NBIN	NWM	DWRB	BITB	TS	TSIM	M	MIS	Total
Preexisting Effects @ SS (Last Time Step)	0.50	1.49	4.57	40.75	0.13	0.39	0.44	0.20	0.12	0.11	0.01	48.71
Steady State - Value of Dep. @ Last Time Step	1.03	3.10	9.50	32.64	0.21	0.66	0.75	0.33	0.21	0.19	0.01	48.63
Preexisting Effects @ Transient State (Max Value Timeslep)	0.50	1.49	4.57	40.75	0.13	0.39	0.44	0.20	0.12	0.11	0.01	48.71
Transient State - Max. Value of Dep. After Transfer	1.03	3.10	9.50	38.31	0.21	0.66	0.75	0.33	0.21	0.19	0.01	54.30
Steady State Change	0.53	1.60	4.93	-8.11	0.08	0.27	0.31	0.14	0.09	0.08	0.00	
Transient State Change	0.53	1.60	4.93	-2.44	0.08	0.27	0.31	0.14	0.09	0.08	0.00	
Total Effects without Transfer - Last Timeslep												48.71
Total Effects with Transfer - Last Time Step												48.63
Total Effects without Transfer - Correlates to Max Value from Total Effects with Transfer												48.71
Total Effects with Transfer - Max Value from Start of Transfer to Last Time Step												54.30

ATTACHMENT 5.6

Water Modeling – Mitigation Analysis

82067

Enter Information for First Transfer Here

WR No.	Div. Rate (CFS)	Con. Vol. (AFA)	No. of Irr. Acres	Priority Date	POD Location	Dedicated Vol. AFA/ AFT	Model Node
Transfer 1: Input Water Right Conditions Prior to Transfer							
34-14140	0.62		36.6	4/8/1970		146.6 48.8	84,119
Transfer 1: Input Water Right Conditions Following Transfer							
34-14140	0.62	0	36.6	4/8/1970	0	146.6 48.8	82,119

Steady State Analysis

Mitigation Check 1 - >10% of Historical:
 Mitigation Check 2: > 2 AFTI:
 Mitigation Check 3 - >10% of Total:
 Mitigation Required?:
 Mitigation Vol. Req'd (ac-ft):

Transient State Analysis

Mitigation Check 1 - >10% of Historical:
 Mitigation Check 2: > 2.01 AFTI:
 Mitigation Required?:
 Mitigation Vol. Req'd (ac-ft):

Impact by Reach (AFT/Trimester)

Ashton to Rexburg	Heise to Shelley	Shelley to Nr Bickit	Nr Bickit to Neeley	Neeley to Minidoka	Dev. Wbl. To Buhl	Buhl to Kspr	Kspr to Kspr	Kspr to Malad	Malad to Malad	Malad to Bancroft
0.50	1.49	4.57	40.75	0.13	0.39	0.44	0.20	0.12	0.11	0.01
1.03	3.10	9.50	32.64	0.21	0.66	0.75	0.33	0.21	0.19	0.01
0.50	1.49	4.57	40.75	0.13	0.39	0.44	0.20	0.12	0.11	0.01
1.03	3.10	9.50	38.31	0.21	0.66	0.75	0.33	0.21	0.19	0.01
Pre-SS Post-SS										
Pre-TS Post-TS										
Pre-1S Post-1S										
Steady State Analysis										
Mitigation Check 1 - >10% of Historical:										
Mitigation Check 2: > 2 AFTI:										
Mitigation Check 3 - >10% of Total:										
Mitigation Required?:										
Mitigation Vol. Req'd (ac-ft):										
107.1%	107.5%	107.8%	-19.9%	61.9%	69.3%	69.3%	69.3%	69.3%	69.3%	69.3%
0.5	1.6	4.9	-8.1	0.1	0.3	0.3	0.1	0.1	0.1	0.0
2.1%	6.4%	19.5%	67.1%	0.4%	1.4%	1.5%	0.7%	0.4%	0.4%	0.0%
NO	NO	YES	NO	NO	NO	NO	NO	NO	NO	NO
0.5	1.6	4.9	-8.1	0.1	0.3	0.3	0.1	0.1	0.1	0.0
Transient State Analysis										
Mitigation Check 1 - >10% of Historical:										
Mitigation Check 2: > 2.01 AFTI:										
Mitigation Required?:										
Mitigation Vol. Req'd (ac-ft):										
107.1%	107.5%	107.8%	-6.0%	61.9%	69.3%	69.3%	69.3%	69.3%	69.3%	69.3%
0.5	1.6	4.9	-2.4	0.1	0.3	0.3	0.1	0.1	0.1	0.0
NO	NO	YES	NO	NO	NO	NO	NO	NO	NO	NO
0.5	1.6	4.9	-2.4	0.1	0.3	0.3	0.1	0.1	0.1	0.0

82067

ATTACHMENT 5.1.2
Water Modeling – Data Entry
Theoretical Transfer to
Adjacent Grid Cell

ENHANCED GROUND-WATER RIGHTS TRANSFER

UNIVERSITY OF IDAHO - IDAHO WATER RESOURCES RESEARCH INSTITUTE

IDAHO DEPARTMENT OF AGRICULTURE

Cells this color are set up for user entries

ENTER STARTING DATE FOR

SIMULATION. THEN PUSH

"UPDATE DATES" BUTTON

YEAR

1970

SEASON

SPRING

TRANSFER NO:

TRANSFER NAME

ENTER CELL LOCATIONS:

'TO' CELL

'FROM1' CELL

'FROM2' CELL

'FROM3' CELL

ROW

83

84

COLUMN

119

119

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 1970	0	.49	.49	0	0	0	0
SUM 1970	0	.49	.49	0	0	0	0
WIN 1970	0	.49	.49	0	0	0	0
SPR 1971	0	.49	.49	0	0	0	0
SUM 1971	0	.49	.49	0	0	0	0
WIN 1971	0	.49	.49	0	0	0	0
SPR 1972	0	.49	.49	0	0	0	0
SUM 1972	0	.49	.49	0	0	0	0
WIN 1972	0	.49	.49	0	0	0	0
SPR 1973	0	.49	.49	0	0	0	0
SUM 1973	0	.49	.49	0	0	0	0
WIN 1973	0	.49	.49	0	0	0	0
SPR 1974	0	.49	.49	0	0	0	0
SUM 1974	0	.49	.49	0	0	0	0
WIN 1974	0	.49	.49	0	0	0	0
SPR 1975	0	.49	.49	0	0	0	0
SUM 1975	0	.49	.49	0	0	0	0
WIN 1975	0	.49	.49	0	0	0	0
SPR 1976	0	.49	.49	0	0	0	0
SUM 1976	0	.49	.49	0	0	0	0
WIN 1976	0	.49	.49	0	0	0	0
SPR 1977	0	.49	.49	0	0	0	0
SUM 1977	0	.49	.49	0	0	0	0
WIN 1977	0	.49	.49	0	0	0	0
SPR 1978	0	.49	.49	0	0	0	0
SUM 1978	0	.49	.49	0	0	0	0
WIN 1978	0	.49	.49	0	0	0	0
SPR 1979	0	.49	.49	0	0	0	0
SUM 1979	0	.49	.49	0	0	0	0
WIN 1979	0	.49	.49	0	0	0	0
SPR 1980	0	.49	.49	0	0	0	0
SUM 1980	0	.49	.49	0	0	0	0
WIN 1980	0	.49	.49	0	0	0	0
SPR 1981	0	.49	.49	0	0	0	0
SUM 1981	0	.49	.49	0	0	0	0
WIN 1981	0	.49	.49	0	0	0	0
SPR 1982	0	.49	.49	0	0	0	0
SUM 1982	0	.49	.49	0	0	0	0
WIN 1982	0	.49	.49	0	0	0	0

SPR 1983	0	.49	.49	0	0	0	0
SUM 1983	0	.49	.49	0	0	0	0
WIN 1983	0	.49	.49	0	0	0	0
SPR 1984	0	.49	.49	0	0	0	0
SUM 1984	0	.49	.49	0	0	0	0
WIN 1984	0	.49	.49	0	0	0	0
SPR 1985	0	.49	.49	0	0	0	0
SUM 1985	0	.49	.49	0	0	0	0
WIN 1985	0	.49	.49	0	0	0	0
SPR 1986	0	.49	.49	0	0	0	0
SUM 1986	0	.49	.49	0	0	0	0
WIN 1986	0	.49	.49	0	0	0	0
SPR 1987	0	.49	.49	0	0	0	0
SUM 1987	0	.49	.49	0	0	0	0
WIN 1987	0	.49	.49	0	0	0	0
SPR 1988	0	.49	.49	0	0	0	0
SUM 1988	0	.49	.49	0	0	0	0
WIN 1988	0	.49	.49	0	0	0	0
SPR 1989	0	.49	.49	0	0	0	0
SUM 1989	0	.49	.49	0	0	0	0
WIN 1989	0	.49	.49	0	0	0	0
SPR 1990	0	.49	.49	0	0	0	0
SUM 1990	0	.49	.49	0	0	0	0
WIN 1990	0	.49	.49	0	0	0	0
SPR 1991	0	.49	.49	0	0	0	0
SUM 1991	0	.49	.49	0	0	0	0
WIN 1991	0	.49	.49	0	0	0	0
SPR 1992	0	.49	.49	0	0	0	0
SUM 1992	0	.49	.49	0	0	0	0
WIN 1992	0	.49	.49	0	0	0	0
SPR 1993	0	.49	.49	0	0	0	0
SUM 1993	0	.49	.49	0	0	0	0
WIN 1993	0	.49	.49	0	0	0	0
SPR 1994	0	.49	.49	0	0	0	0
SUM 1994	0	.49	.49	0	0	0	0
WIN 1994	0	.49	.49	0	0	0	0
SPR 1995	0	.49	.49	0	0	0	0
SUM 1995	0	.49	.49	0	0	0	0
WIN 1995	0	.49	.49	0	0	0	0
SPR 1996	0	.49	.49	0	0	0	0
SUM 1996	0	.49	.49	0	0	0	0
WIN 1996	0	.49	.49	0	0	0	0
SPR 1997	0	.49	.49	0	0	0	0
SUM 1997	0	.49	.49	0	0	0	0
WIN 1997	0	.49	.49	0	0	0	0
SPR 1998	0	.49	.49	0	0	0	0
SUM 1998	0	.49	.49	0	0	0	0
WIN 1998	0	.49	.49	0	0	0	0
SPR 1999	0	.49	.49	0	0	0	0
SUM 1999	0	.49	.49	0	0	0	0
WIN 1999	0	.49	.49	0	0	0	0
SPR 2000	0	.49	.49	0	0	0	0
SUM 2000	0	.49	.49	0	0	0	0
WIN 2000	0	.49	.49	0	0	0	0
SPR 2001	0	.49	.49	0	0	0	0
SUM 2001	0	.49	.49	0	0	0	0
WIN 2001	0	.49	.49	0	0	0	0
SPR 2002	0	.49	.49	0	0	0	0
SUM 2002	0	.49	.49	0	0	0	0
WIN 2002	0	.49	.49	0	0	0	0
SPR 2003	0	.49	.49	0	0	0	0
SUM 2003	0	.49	.49	0	0	0	0
WIN 2003	0	.49	.49	0	0	0	0
SPR 2004	0	.49	.49	0	0	0	0
SUM 2004	0	.49	.49	0	0	0	0
WIN 2004	0	.49	.49	0	0	0	0
SPR 2005	0	.49	.49	0	0	0	0
SUM 2005	0	.49	.49	0	0	0	0
WIN 2005	0	.49	.49	0	0	0	0
SPR 2006	0	.49	.49	0	0	0	0
SUM 2006	0	.49	.49	0	0	0	0

WIN 2006	0	49	49	0	0	0	0
SPR 2007	0	49	49	0	0	0	0
SUM 2007	0	49	49	0	0	0	0
WIN 2007	0	49	49	0	0	0	0
SPR 2008	0	49	49	0	0	0	0
SUM 2008	0	49	49	0	0	0	0
WIN 2008	0	49	49	0	0	0	0
SPR 2009	0	49	49	0	0	0	0
SUM 2009	0	49	49	0	0	0	0
WIN 2009	0	49	49	0	0	0	0
SPR 2010	0	49	49	0	0	0	0
SUM 2010	0	49	49	0	0	0	0
WIN 2010	0	49	49	0	0	0	0
SPR 2011	0	49	49	0	0	0	0
SUM 2011	0	49	49	0	0	0	0
WIN 2011	0	49	49	0	0	0	0
SPR 2012	0	49	49	0	0	0	0
SUM 2012	0	49	49	0	0	0	0
WIN 2012	0	49	49	0	0	0	0
SPR 2013	0	49	49	0	0	0	0
SUM 2013	0	49	49	0	0	0	0
WIN 2013	0	49	49	0	0	0	0
SPR 2014	0	49	49	0	0	0	0
SUM 2014	0	49	49	0	0	0	0
WIN 2014	0	49	49	0	0	0	0
SPR 2015	0	49	49	0	0	0	0
SUM 2015	0	49	49	0	0	0	0
WIN 2015	0	49	49	0	0	0	0
SPR 2016	0	49	49	0	0	0	0
SUM 2016	0	49	49	0	0	0	0
WIN 2016	0	49	49	0	0	0	0
SPR 2017	0	49	49	0	0	0	0
SUM 2017	0	49	49	0	0	0	0
WIN 2017	0	49	49	0	0	0	0
SPR 2018	49	0	49	0	0	0	0
SUM 2018	49	0	49	0	0	0	0
WIN 2018	49	0	49	0	0	0	0
SPR 2019	49	0	49	0	0	0	0
SUM 2019	49	0	49	0	0	0	0
WIN 2019	49	0	49	0	0	0	0
SPR 2020	49	0	49	0	0	0	0
SUM 2020	49	0	49	0	0	0	0
WIN 2020	49	0	49	0	0	0	0
SPR 2021	49	0	49	0	0	0	0
SUM 2021	49	0	49	0	0	0	0
WIN 2021	49	0	49	0	0	0	0
SPR 2022	49	0	49	0	0	0	0
SUM 2022	49	0	49	0	0	0	0
WIN 2022	49	0	49	0	0	0	0
SPR 2023	49	0	49	0	0	0	0
SUM 2023	49	0	49	0	0	0	0
WIN 2023	49	0	49	0	0	0	0
SPR 2024	49	0	49	0	0	0	0
SUM 2024	49	0	49	0	0	0	0
WIN 2024	49	0	49	0	0	0	0
SPR 2025	49	0	49	0	0	0	0
SUM 2025	49	0	49	0	0	0	0
WIN 2025	49	0	49	0	0	0	0
SPR 2026	49	0	49	0	0	0	0
SUM 2026	49	0	49	0	0	0	0
WIN 2026	49	0	49	0	0	0	0
SPR 2027	49	0	49	0	0	0	0
SUM 2027	49	0	49	0	0	0	0
WIN 2027	49	0	49	0	0	0	0
SPR 2028	49	0	49	0	0	0	0
SUM 2028	49	0	49	0	0	0	0
WIN 2028	49	0	49	0	0	0	0
SPR 2029	49	0	49	0	0	0	0
SUM 2029	49	0	49	0	0	0	0
WIN 2029	49	0	49	0	0	0	0
SPR 2030	49	0	49	0	0	0	0
SUM 2030	49	0	49	0	0	0	0

WIN 2030	49	0	49	0	0	0	0
SPR 2031	49	0	49	0	0	0	0
SUM 2031	49	0	49	0	0	0	0
WIN 2031	49	0	49	0	0	0	0
SPR 2032	49	0	49	0	0	0	0
SUM 2032	49	0	49	0	0	0	0
WIN 2032	49	0	49	0	0	0	0
SPR 2033	49	0	49	0	0	0	0
SUM 2033	49	0	49	0	0	0	0
WIN 2033	49	0	49	0	0	0	0
SPR 2034	49	0	49	0	0	0	0
SUM 2034	49	0	49	0	0	0	0
WIN 2034	49	0	49	0	0	0	0
SPR 2035	49	0	49	0	0	0	0
SUM 2035	49	0	49	0	0	0	0
WIN 2035	49	0	49	0	0	0	0
SPR 2036	49	0	49	0	0	0	0
SUM 2036	49	0	49	0	0	0	0
WIN 2036	49	0	49	0	0	0	0
SPR 2037	49	0	49	0	0	0	0
SUM 2037	49	0	49	0	0	0	0
WIN 2037	49	0	49	0	0	0	0
SPR 2038	49	0	49	0	0	0	0
SUM 2038	49	0	49	0	0	0	0
WIN 2038	49	0	49	0	0	0	0
SPR 2039	49	0	49	0	0	0	0
SUM 2039	49	0	49	0	0	0	0
WIN 2039	49	0	49	0	0	0	0
SPR 2040	49	0	49	0	0	0	0
SUM 2040	49	0	49	0	0	0	0
WIN 2040	49	0	49	0	0	0	0
SPR 2041	49	0	49	0	0	0	0
SUM 2041	49	0	49	0	0	0	0
WIN 2041	49	0	49	0	0	0	0
SPR 2042	49	0	49	0	0	0	0
SUM 2042	49	0	49	0	0	0	0
WIN 2042	49	0	49	0	0	0	0
SPR 2043	49	0	49	0	0	0	0
SUM 2043	49	0	49	0	0	0	0
WIN 2043	49	0	49	0	0	0	0
SPR 2044	49	0	49	0	0	0	0
SUM 2044	49	0	49	0	0	0	0
WIN 2044	49	0	49	0	0	0	0
SPR 2045	49	0	49	0	0	0	0
SUM 2045	49	0	49	0	0	0	0
WIN 2045	49	0	49	0	0	0	0
SPR 2046	49	0	49	0	0	0	0
SUM 2046	49	0	49	0	0	0	0
WIN 2046	49	0	49	0	0	0	0
SPR 2047	49	0	49	0	0	0	0
SUM 2047	49	0	49	0	0	0	0
WIN 2047	49	0	49	0	0	0	0
SPR 2048	49	0	49	0	0	0	0
SUM 2048	49	0	49	0	0	0	0
WIN 2048	49	0	49	0	0	0	0
SPR 2049	49	0	49	0	0	0	0
SUM 2049	49	0	49	0	0	0	0
WIN 2049	49	0	49	0	0	0	0
SPR 2050	49	0	49	0	0	0	0
SUM 2050	49	0	49	0	0	0	0
WIN 2050	49	0	49	0	0	0	0
SPR 2051	49	0	49	0	0	0	0
SUM 2051	49	0	49	0	0	0	0
WIN 2051	49	0	49	0	0	0	0
SPR 2052	49	0	49	0	0	0	0
SUM 2052	49	0	49	0	0	0	0
WIN 2052	49	0	49	0	0	0	0
SPR 2053	49	0	49	0	0	0	0
SUM 2053	49	0	49	0	0	0	0
WIN 2053	49	0	49	0	0	0	0
SPR 2054	49	0	49	0	0	0	0
SUM 2054	49	0	49	0	0	0	0

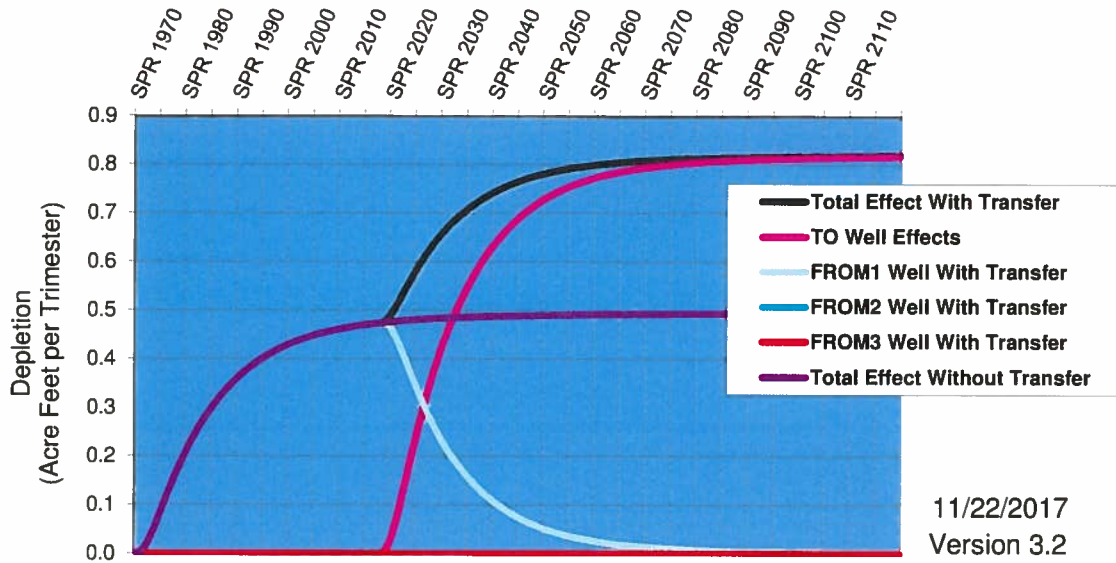
WIN 2054	.19	0	.49	0	0	0	0
SPR 2055	.19	0	.49	0	0	0	0
SUM 2055	.19	0	.49	0	0	0	0
WIN 2055	.19	0	.49	0	0	0	0
SPR 2056	.19	0	.49	0	0	0	0
SUM 2056	.19	0	.49	0	0	0	0
WIN 2056	.19	0	.49	0	0	0	0
SPR 2057	.19	0	.49	0	0	0	0
SUM 2057	.19	0	.49	0	0	0	0
WIN 2057	.19	0	.49	0	0	0	0
SPR 2058	.19	0	.49	0	0	0	0
SUM 2058	.19	0	.49	0	0	0	0
WIN 2058	.19	0	.49	0	0	0	0
SPR 2059	.19	0	.49	0	0	0	0
SUM 2059	.19	0	.49	0	0	0	0
WIN 2059	.19	0	.49	0	0	0	0
SPR 2060	.19	0	.49	0	0	0	0
SUM 2060	.19	0	.49	0	0	0	0
WIN 2060	.19	0	.49	0	0	0	0
SPR 2061	.19	0	.49	0	0	0	0
SUM 2061	.19	0	.49	0	0	0	0
WIN 2061	.19	0	.49	0	0	0	0
SPR 2062	.19	0	.49	0	0	0	0
SUM 2062	.19	0	.49	0	0	0	0
WIN 2062	.19	0	.49	0	0	0	0
SPR 2063	.19	0	.49	0	0	0	0
SUM 2063	.19	0	.49	0	0	0	0
WIN 2063	.19	0	.49	0	0	0	0
SPR 2064	.19	0	.49	0	0	0	0
SUM 2064	.19	0	.49	0	0	0	0
WIN 2064	.19	0	.49	0	0	0	0
SPR 2065	.19	0	.49	0	0	0	0
SUM 2065	.19	0	.49	0	0	0	0
WIN 2065	.19	0	.49	0	0	0	0
SPR 2066	.19	0	.49	0	0	0	0
SUM 2066	.19	0	.49	0	0	0	0
WIN 2066	.19	0	.49	0	0	0	0
SPR 2067	.19	0	.49	0	0	0	0
SUM 2067	.19	0	.49	0	0	0	0
WIN 2067	.19	0	.49	0	0	0	0
SPR 2068	.19	0	.49	0	0	0	0
SUM 2068	.19	0	.49	0	0	0	0
WIN 2068	.19	0	.49	0	0	0	0
SPR 2069	.19	0	.49	0	0	0	0
SUM 2069	.19	0	.49	0	0	0	0
WIN 2069	.19	0	.49	0	0	0	0
SPR 2070	.19	0	.49	0	0	0	0
SUM 2070	.19	0	.49	0	0	0	0
WIN 2070	.19	0	.49	0	0	0	0
SPR 2071	.19	0	.49	0	0	0	0
SUM 2071	.19	0	.49	0	0	0	0
WIN 2071	.19	0	.49	0	0	0	0
SPR 2072	.19	0	.49	0	0	0	0
SUM 2072	.19	0	.49	0	0	0	0
WIN 2072	.19	0	.49	0	0	0	0
SPR 2073	.19	0	.49	0	0	0	0
SUM 2073	.19	0	.49	0	0	0	0
WIN 2073	.19	0	.49	0	0	0	0
SPR 2074	.19	0	.49	0	0	0	0
SUM 2074	.19	0	.49	0	0	0	0
WIN 2074	.19	0	.49	0	0	0	0
SPR 2075	.19	0	.49	0	0	0	0
SUM 2075	.19	0	.49	0	0	0	0
WIN 2075	.19	0	.49	0	0	0	0
SPR 2076	.19	0	.49	0	0	0	0
SUM 2076	.19	0	.49	0	0	0	0
WIN 2076	.19	0	.49	0	0	0	0
SPR 2077	.19	0	.49	0	0	0	0
SUM 2077	.19	0	.49	0	0	0	0
WIN 2077	.19	0	.49	0	0	0	0
SPR 2078	.19	0	.49	0	0	0	0
SUM 2078	.19	0	.49	0	0	0	0

WIN 2078	49	0	49	0	0	0	0
SPR 2079	49	0	49	0	0	0	0
SUM 2079	49	0	49	0	0	0	0
WIN 2079	49	0	49	0	0	0	0
SPR 2080	49	0	49	0	0	0	0
SUM 2080	49	0	49	0	0	0	0
WIN 2080	49	0	49	0	0	0	0
SPR 2081	49	0	49	0	0	0	0
SUM 2081	49	0	49	0	0	0	0
WIN 2081	49	0	49	0	0	0	0
SPR 2082	49	0	49	0	0	0	0
SUM 2082	49	0	49	0	0	0	0
WIN 2082	49	0	49	0	0	0	0
SPR 2083	49	0	49	0	0	0	0
SUM 2083	49	0	49	0	0	0	0
WIN 2083	49	0	49	0	0	0	0
SPR 2084	49	0	49	0	0	0	0
SUM 2084	49	0	49	0	0	0	0
WIN 2084	49	0	49	0	0	0	0
SPR 2085	49	0	49	0	0	0	0
SUM 2085	49	0	49	0	0	0	0
WIN 2085	49	0	49	0	0	0	0
SPR 2086	49	0	49	0	0	0	0
SUM 2086	49	0	49	0	0	0	0
WIN 2086	49	0	49	0	0	0	0
SPR 2087	49	0	49	0	0	0	0
SUM 2087	49	0	49	0	0	0	0
WIN 2087	49	0	49	0	0	0	0
SPR 2088	49	0	49	0	0	0	0
SUM 2088	49	0	49	0	0	0	0
WIN 2088	49	0	49	0	0	0	0
SPR 2089	49	0	49	0	0	0	0
SUM 2089	49	0	49	0	0	0	0
WIN 2089	49	0	49	0	0	0	0
SPR 2090	49	0	49	0	0	0	0
SUM 2090	49	0	49	0	0	0	0
WIN 2090	49	0	49	0	0	0	0
SPR 2091	49	0	49	0	0	0	0
SUM 2091	49	0	49	0	0	0	0
WIN 2091	49	0	49	0	0	0	0
SPR 2092	49	0	49	0	0	0	0
SUM 2092	49	0	49	0	0	0	0
WIN 2092	49	0	49	0	0	0	0
SPR 2093	49	0	49	0	0	0	0
SUM 2093	49	0	49	0	0	0	0
WIN 2093	49	0	49	0	0	0	0
SPR 2094	49	0	49	0	0	0	0
SUM 2094	49	0	49	0	0	0	0
WIN 2094	49	0	49	0	0	0	0
SPR 2095	49	0	49	0	0	0	0
SUM 2095	49	0	49	0	0	0	0
WIN 2095	49	0	49	0	0	0	0
SPR 2096	49	0	49	0	0	0	0
SUM 2096	49	0	49	0	0	0	0
WIN 2096	49	0	49	0	0	0	0
SPR 2097	49	0	49	0	0	0	0
SUM 2097	49	0	49	0	0	0	0
WIN 2097	49	0	49	0	0	0	0
SPR 2098	49	0	49	0	0	0	0
SUM 2098	49	0	49	0	0	0	0
WIN 2098	49	0	49	0	0	0	0
SPR 2099	49	0	49	0	0	0	0
SUM 2099	49	0	49	0	0	0	0
WIN 2099	49	0	49	0	0	0	0
SPR 2100	49	0	49	0	0	0	0
SUM 2100	49	0	49	0	0	0	0
WIN 2100	49	0	49	0	0	0	0
SPR 2101	49	0	49	0	0	0	0
SUM 2101	49	0	49	0	0	0	0
WIN 2101	49	0	49	0	0	0	0
SPR 2102	49	0	49	0	0	0	0
SUM 2102	49	0	49	0	0	0	0

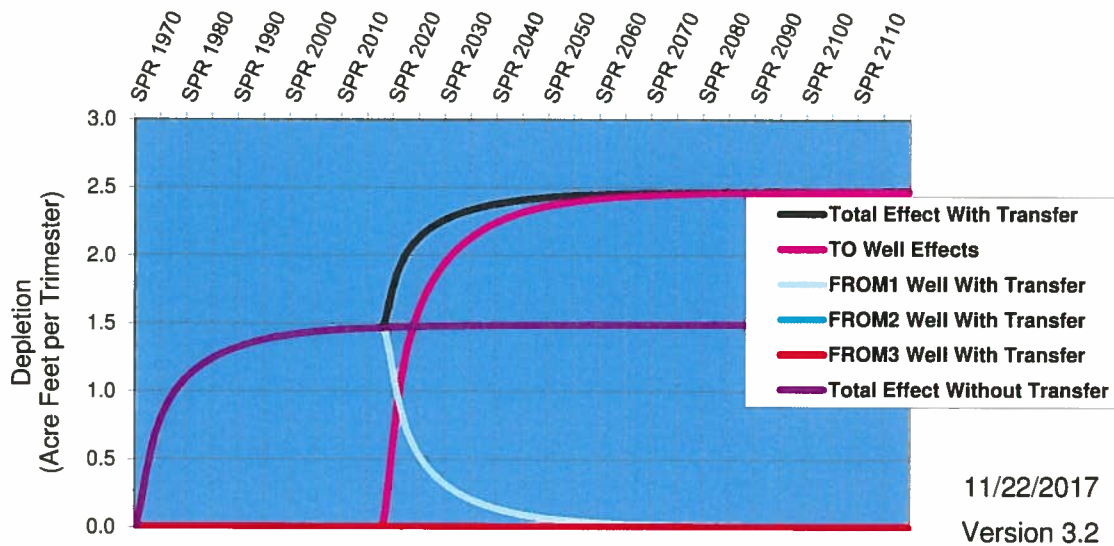
WIN 2102	49	0	49	0	0	0	0
SPR 2103	49	0	49	0	0	0	0
SUM 2103	49	0	49	0	0	0	0
WIN 2103	49	0	49	0	0	0	0
SPR 2104	49	0	49	0	0	0	0
SUM 2104	49	0	49	0	0	0	0
WIN 2104	49	0	49	0	0	0	0
SPR 2105	49	0	49	0	0	0	0
SUM 2105	49	0	49	0	0	0	0
WIN 2105	49	0	49	0	0	0	0
SPR 2106	49	0	49	0	0	0	0
SUM 2106	49	0	49	0	0	0	0
WIN 2106	49	0	49	0	0	0	0
SPR 2107	49	0	49	0	0	0	0
SUM 2107	49	0	49	0	0	0	0
WIN 2107	49	0	49	0	0	0	0
SPR 2108	49	0	49	0	0	0	0
SUM 2108	49	0	49	0	0	0	0
WIN 2108	49	0	49	0	0	0	0
SPR 2109	49	0	49	0	0	0	0
SUM 2109	49	0	49	0	0	0	0
WIN 2109	49	0	49	0	0	0	0
SPR 2110	49	0	49	0	0	0	0
SUM 2110	49	0	49	0	0	0	0
WIN 2110	49	0	49	0	0	0	0
SPR 2111	49	0	49	0	0	0	0
SUM 2111	49	0	49	0	0	0	0
WIN 2111	49	0	49	0	0	0	0
SPR 2112	49	0	49	0	0	0	0
SUM 2112	49	0	49	0	0	0	0
WIN 2112	49	0	49	0	0	0	0
SPR 2113	49	0	49	0	0	0	0
SUM 2113	49	0	49	0	0	0	0
WIN 2113	49	0	49	0	0	0	0
SPR 2114	49	0	49	0	0	0	0
SUM 2114	49	0	49	0	0	0	0
WIN 2114	49	0	49	0	0	0	0
SPR 2115	49	0	49	0	0	0	0
SUM 2115	49	0	49	0	0	0	0
WIN 2115	49	0	49	0	0	0	0
SPR 2116	49	0	49	0	0	0	0
SUM 2116	49	0	49	0	0	0	0
WIN 2116	49	0	49	0	0	0	0
SPR 2117	49	0	49	0	0	0	0
SUM 2117	49	0	49	0	0	0	0
WIN 2117	49	0	49	0	0	0	0
SPR 2118	49	0	49	0	0	0	0
SUM 2118	49	0	49	0	0	0	0
WIN 2118	49	0	49	0	0	0	0
SPR 2119	49	0	49	0	0	0	0
SUM 2119	49	0	49	0	0	0	0
WIN 2119	49	0	49	0	0	0	0

ATTACHMENT 5.2.2
Water Modeling – Graphs
above Milner
Theoretical Transfer to
Adjacent Grid Cell

Hydrologic Response--Ashton to Rexburg
Customer Name: **Transfer No:**



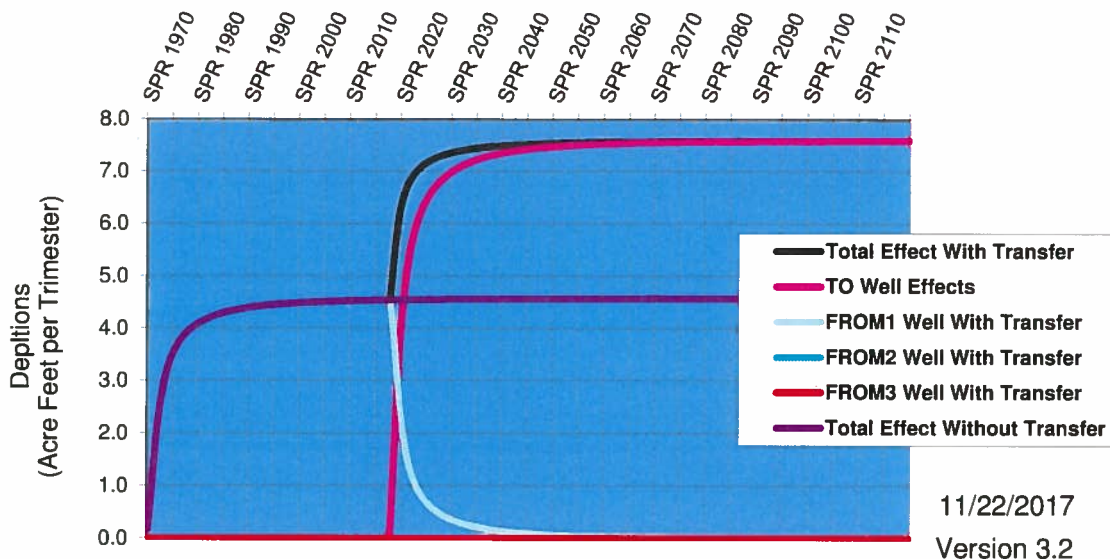
Hydrologic Response--Heise to Shelley
Customer Name: **Transfer No:**



Hydrologic Response--Shelley to Near Blackfoot

Customer Name:

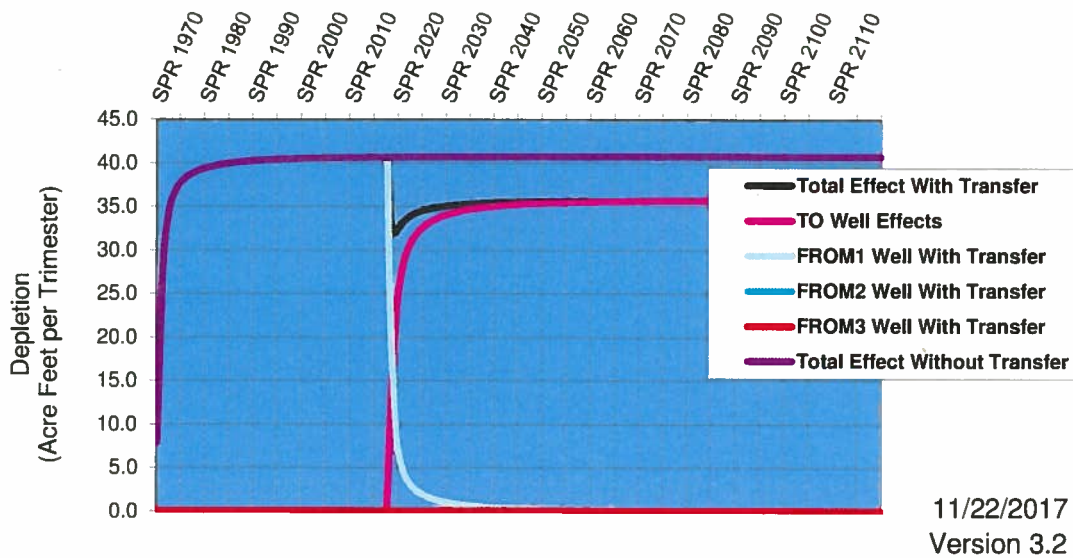
Transfer No:

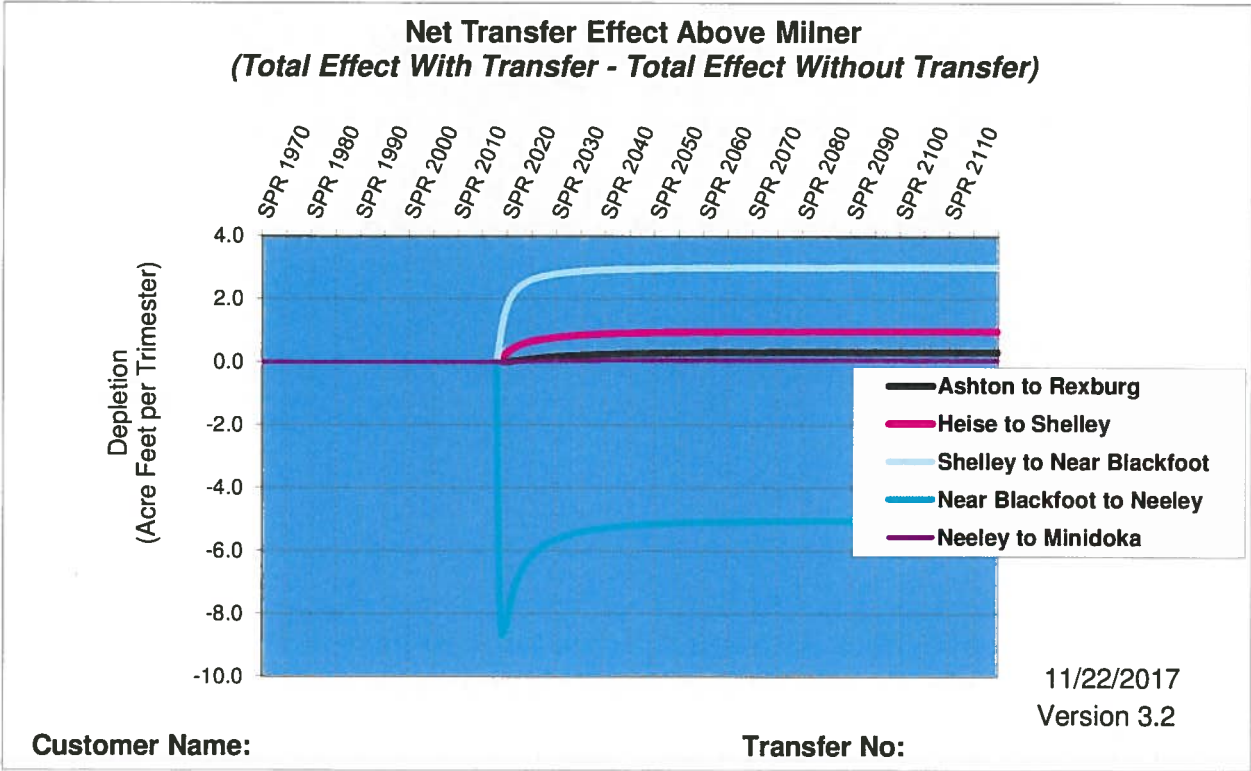
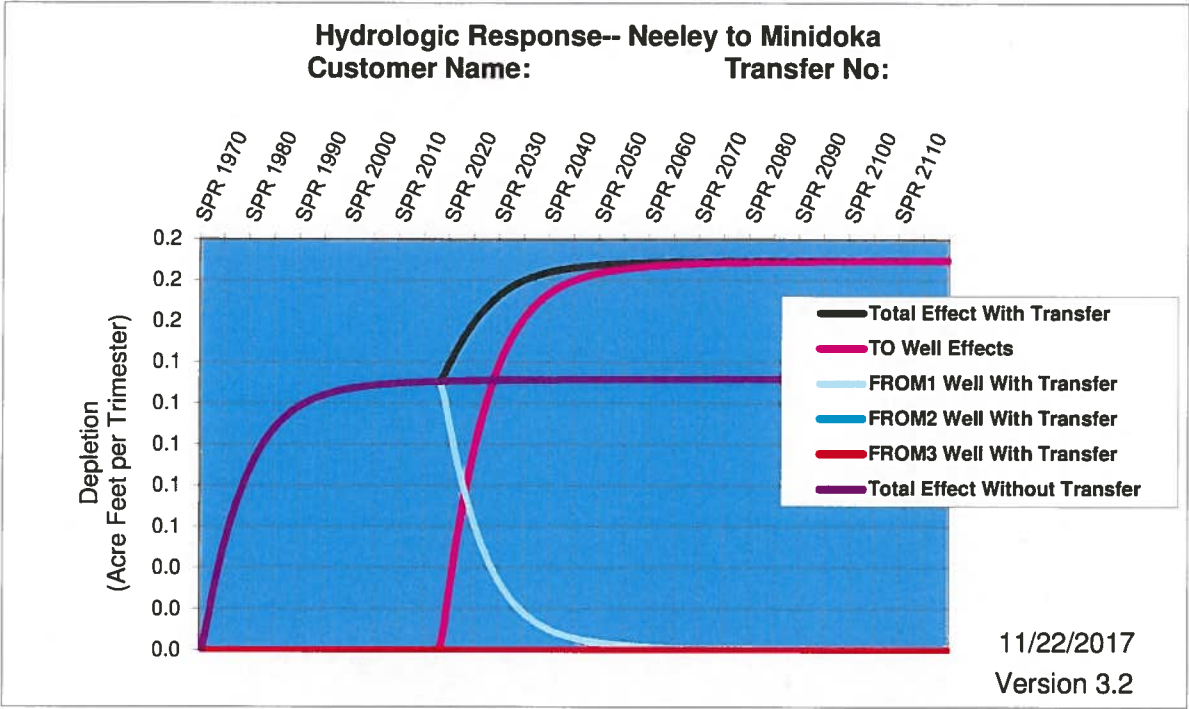


Hydrologic Response-- Near Blackfoot to Neeley

Customer Name:

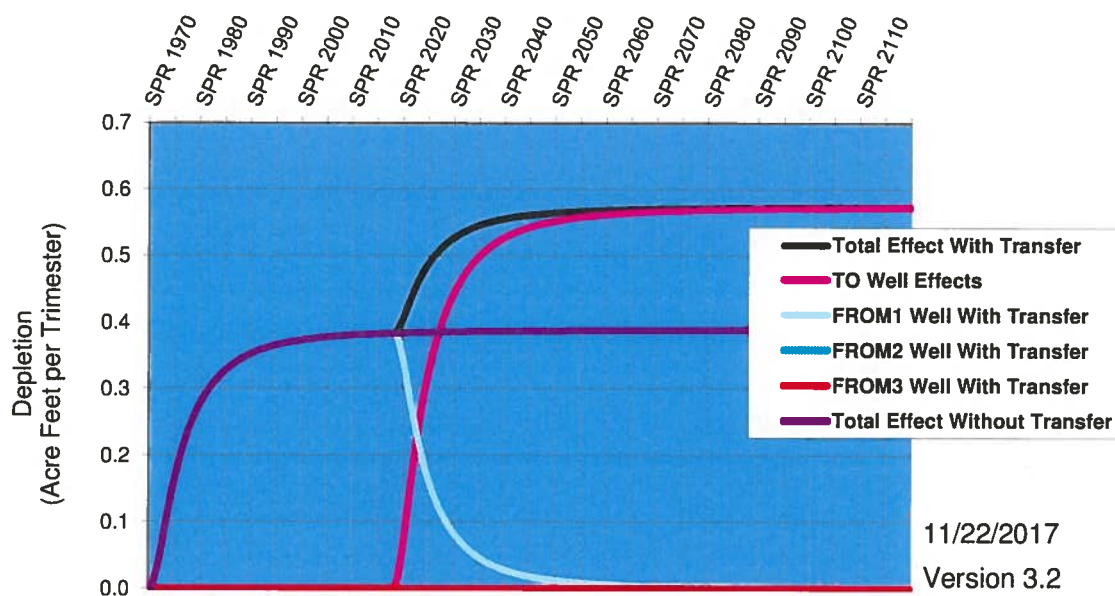
Transfer No:



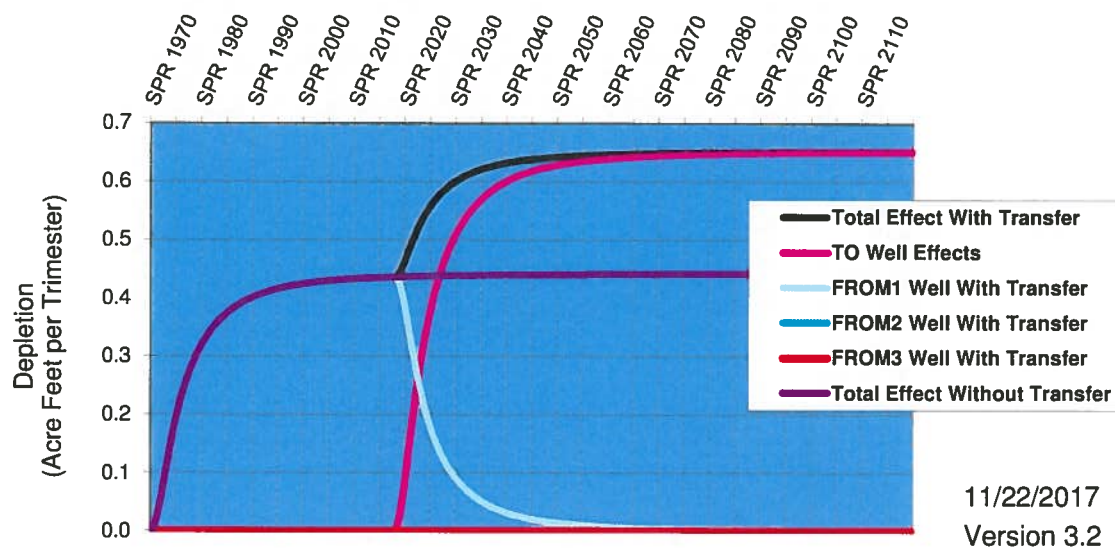


ATTACHMENT 5.3.2
Water Modeling – Graphs
below Milner
Theoretical Transfer to
Adjacent Grid Cell

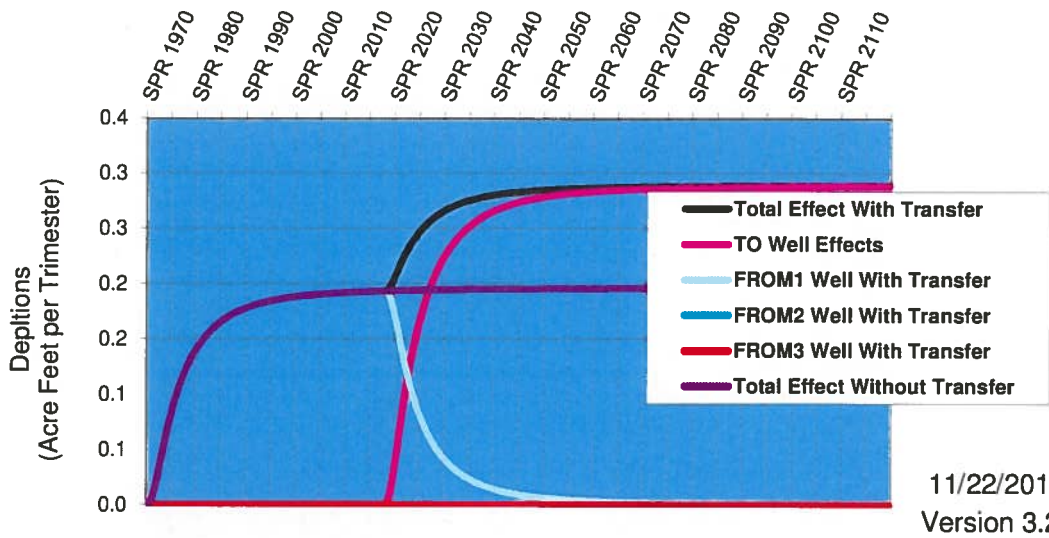
Hydrologic Response--Devil's Washbowl to Buhl **Customer Name:** **Transfer No:**



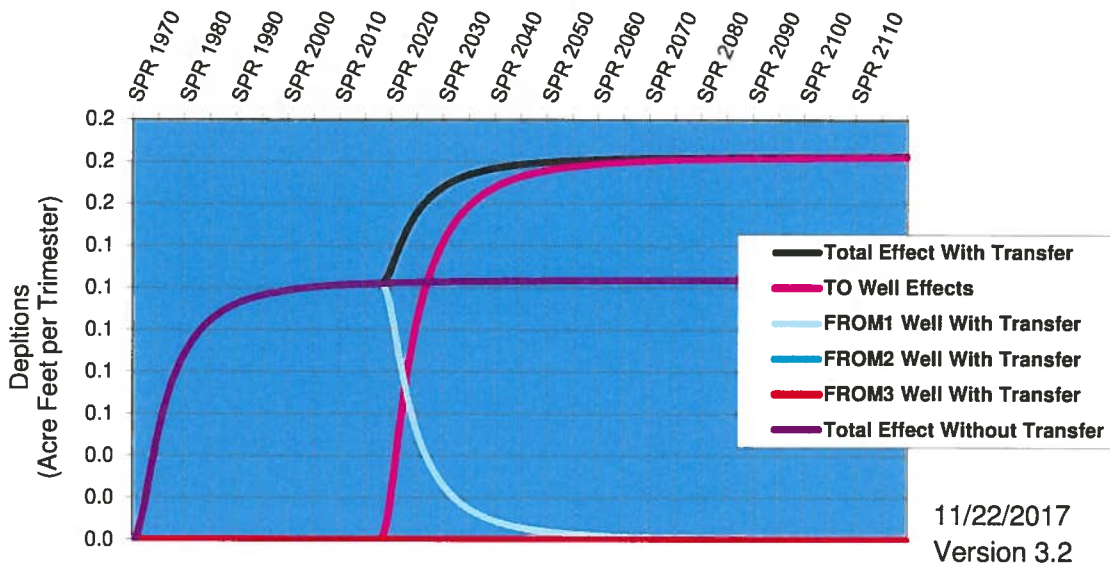
Hydrologic Response--Buhl to Thousand Springs **Customer Name:** **Transfer No:**



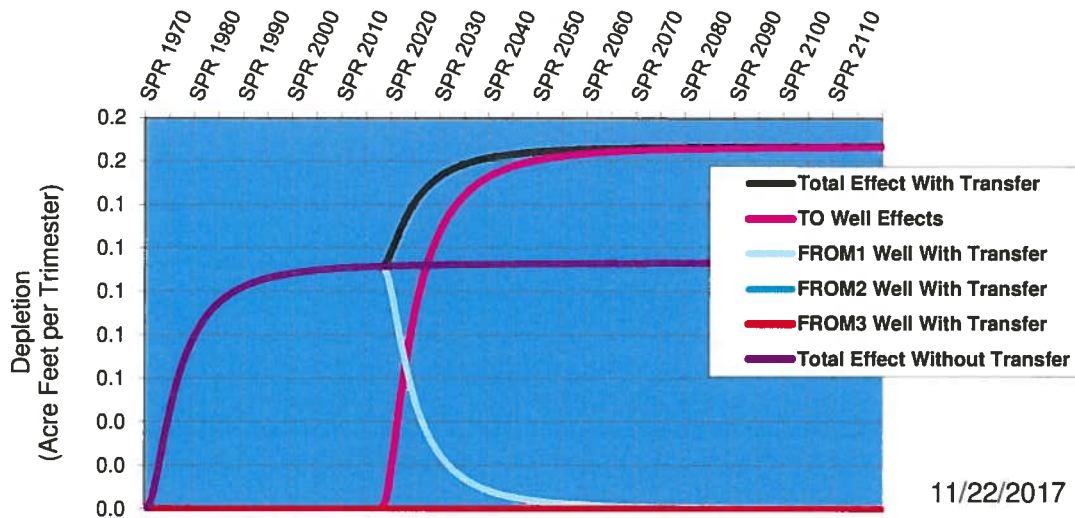
Hydrologic Response--Thousand Springs Customer Name: Transfer No:



Hydrologic Response--Thousand Springs to Malad Customer Name: Transfer No:



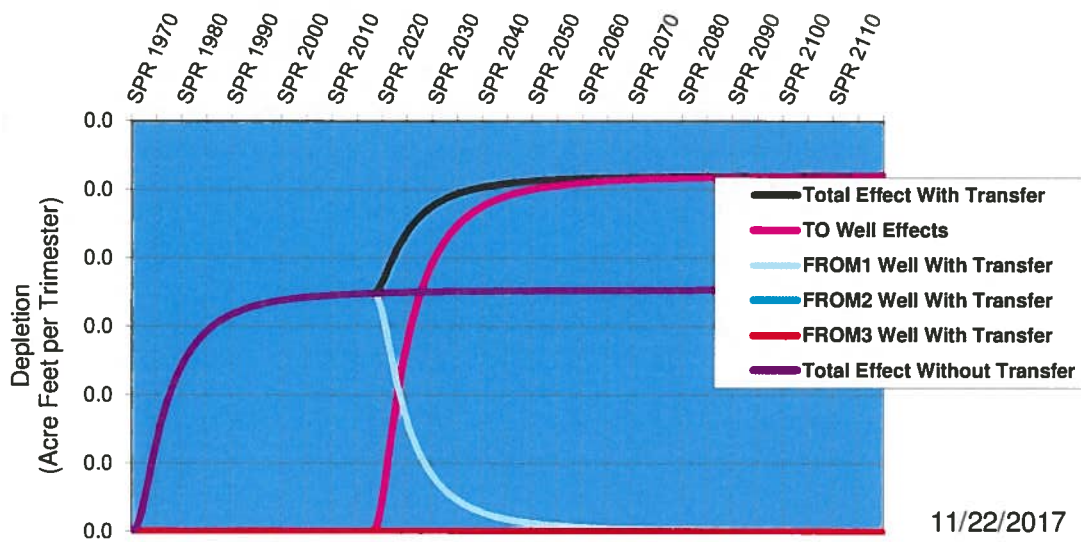
Hydrologic Response-- Malad Customer Name: Transfer No:



11/22/2017

Version 3.2

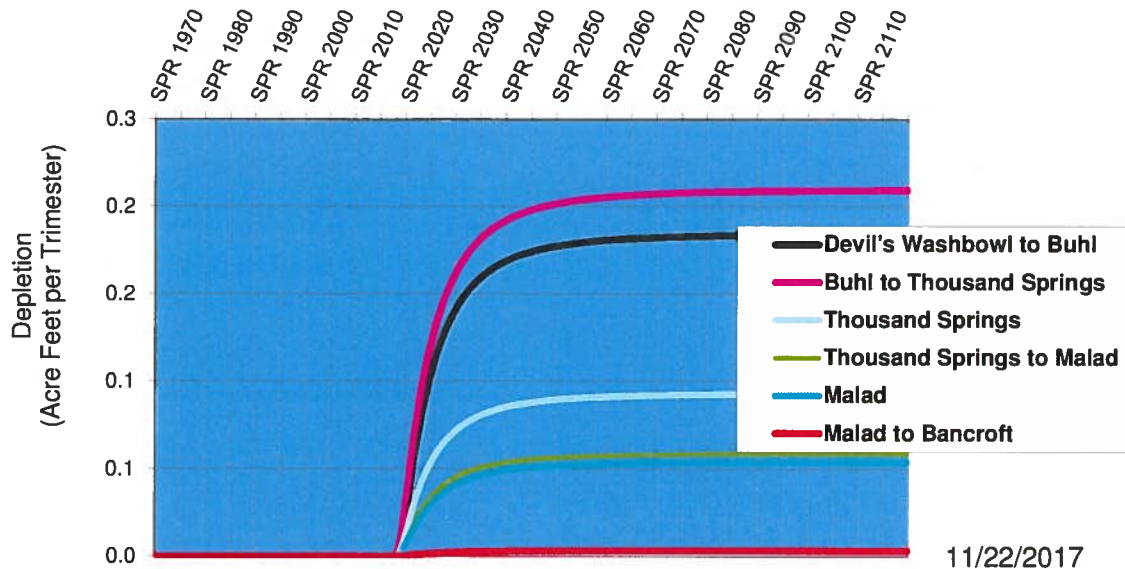
Hydrologic Response-- Malad to Bancroft Customer Name: Transfer No:



11/22/2017

Version 3.2

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



11/22/2017
Version 3.2

Customer Name:

Transfer No:

ATTACHMENT 5.4.2
Water Modeling – Change
Ratio

Theoretical Transfer to
Adjacent Grid Cell

[illegible]

ATTACHMENT 5.5.2
Water Modeling – Calculated
Effects

Theoretical Transfer to
Adjacent Grid Cell

Enter First Time Step of Transfer: **SPH 2018**

Match: 145 Match: 456

	MR	HIS	SNB	MBN	NM	DWB	BIT	TS	TSIM	M	MB	Total
Preexisting Effects @ SS (Last Time Step)	0.50	1.49	4.57	40.75	0.13	0.39	0.44	0.20	0.12	0.11	0.01	48.71
Steady State - Value of Dep. @ Last Time Step	0.82	2.47	7.59	35.71	0.19	0.57	0.65	0.29	0.16	0.17	0.01	48.66
Preexisting Effects @ Transient State (Max Value Time Step)	0.50	1.49	4.57	40.75	0.13	0.39	0.44	0.20	0.12	0.11	0.01	48.71
Transient State - Max. Value of Dep. After Transfer	0.82	2.47	7.59	36.56	0.19	0.57	0.65	0.29	0.16	0.17	0.01	49.53
Steady State Change	0.32	0.98	3.02	-5.04	0.06	0.18	0.21	0.09	0.06	0.05	0.00	
Transient State Change	0.32	0.98	3.02	-4.17	0.06	0.18	0.21	0.09	0.06	0.05	0.00	
Total Effects without Transfer - Last Time Step												48.71
Total Effects with Transfer - Last Time Step												48.66
Total Effects without Transfer - Correlates to Max Value from Start of Transfer to Last Time Step												48.71
Total Effects with Transfer - Max Value from Start of Transfer to Last Time Step												49.53

ATTACHMENT 5.6.2
Water Modeling – Mitigation
Analysis
Theoretical Transfer to
Adjacent Grid Cell

Enter Information for 2nd Transfer Here

WR No.	Div. Rate (GFS)	Con. Vol. (AFA)	No. of Irr. Acres	Priority Date	POD Location	Dedicated Vol. AFA/ AFT	Model Node
Transfer 2: Input Water Right Conditions Prior to Transfer							
34-14140	0.82		36.6	4/8/1970		146.6 48.8	84,119
Transfer 1: Input Water Right Conditions Following Transfer							
34-14140	0.62	0	36.6	4/8/1970	0	146.6 48.8	83,119

Impact by Reach (AF/Trimester)

Ashton to Rexburg	Heise to Shelley	Shelley to Nr Bickit	Nr Bickit to Neeley	Neeley to Mindoka	Dev. Wbl. To Buhl	Buhl to Kspr	Kspr to Kspr	Malad to Malad	Malad to Bancroft
0.50	1.49	4.57	40.75	0.13	0.39	0.44	0.20	0.12	0.01
0.82	2.47	7.59	35.71	0.19	0.57	0.65	0.29	0.18	0.01
0.50	1.49	4.57	40.75	0.13	0.39	0.44	0.20	0.12	0.01
0.82	2.47	7.59	36.58	0.19	0.57	0.65	0.29	0.18	0.01

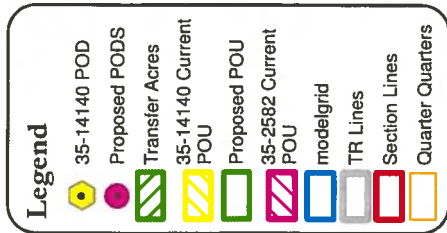
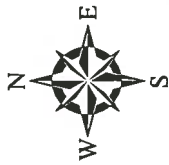
Steady State Analysis									
Mitigation Check 1 - >10% of Historical:	65.8%	65.8%	66.0%	-12.4%	47.4%	47.4%	47.4%	47.4%	47.4%
Mitigation Check 2: > 2 AFT:	0.3	1.0	3.0	-5.0	0.2	0.2	0.1	0.1	0.0
Mitigation Check 3 - >10% of Total:	1.7%	5.1%	15.6%	73.4%	1.2%	1.3%	0.6%	0.4%	0.0%
Mitigation Required?:	NO	NO	YES	NO	NO	NO	NO	NO	NO
Mitigation Vol. Req'd (ac-ft):	0.3	1.0	3.0	-5.0	0.2	0.2	0.1	0.1	0.0

Transient State Analysis									
Mitigation Check 1 - >10% of Historical:	65.8%	65.8%	66.0%	-10.2%	47.4%	47.4%	47.4%	47.4%	47.4%
Mitigation Check 2: > 2.01 AFT:	0.3	1.0	3.0	-4.2	0.2	0.2	0.1	0.1	0.0
Mitigation Required?:	NO	NO	YES	NO	NO	NO	NO	NO	NO
Mitigation Vol. Req'd (ac-ft):	0.3	1.0	3.0	-4.2	0.2	0.2	0.1	0.1	0.0

Attachment No. 7a

GIS Maps

HOUGHLAND AND FARMS TRANSFERS



82067



2015 NAIP Photo



Prepared by:
Luke H. Marchant
11/22/2017

Attachment No. 7b
GIS Shapefile

**(Will be sent via email upon
request from IDWR)**

Attachment No. 10
Other

82067

[illegible][illegible][illegible]

Total positive change in acres	41.9
Total negative change in acres	-5.3
Total Allowed Diversion Rate	1.80
Rate/Acre	0.0140
Diversion Rate for Positive Changes in Acres	0.6182
Diversion Rate for Negative Changes in Acres	0.0782

WATER RIGHT NO. 35-14140

[illegible]

PLACE OF USE	DESCRIPTION	BEFORE	PROPOSED	CHANGES

[illegible]

CHANGE IN ACRES

[illegible]

Total positive change in acres	0.0	Used for calculating filling fee
Total negative change in acres	-36.6	
Total Allowed Diversion Rate	4.11	
Rate/Acre	0.0768	
Diversion Rate for Positive Change in Acres	0.0000	
Diversion Rate for Negative Change in Acres	0.6155	