

From: [Cefalo, James](#)
To: [Henman, Christina](#)
Subject: FW: Applications 86712, 86713, 86715 - Update on Technical Review
Date: Wednesday, December 11, 2024 1:49:51 PM
Attachments: [Burtenshaw-Ammon_Transient2022-0105.pdf](#)

Christina,

Please add this email chain and pdf to the scanned documents for Transfers 86712, 86713 and 86715. Document Title = "Revised ESPA Transfer Tool Analysis."

From: Jason Helms <jasoncivil@alumni.nd.edu>
Sent: Friday, January 6, 2023 10:14 AM
To: Cefalo, James <James.Cefalo@idwr.idaho.gov>
Cc: Del Kohtz (del@idahowatercompany.com) <del@idahowatercompany.com>; Fritz, Cooper <Cooper.Fritz@idwr.idaho.gov>; Rob Harris <rharris@holdenlegal.com>
Subject: Re: Applications 86712, 86713, 86715 - Update on Technical Review

Hi James,

With your suggestions I have prepared the attached analysis for transient short-term impact mitigation which I believe meets the minimum impact increase requirements. Unfortunately, it appears to require a single year reduction of 15 acres at the farm during the first year but the municipal transfers are in the range of 36% available in the first year and 72% in the second and third years according to my analysis of acceptable impacts. The consumptive use limitation of 3.075 acre-ft per acre you describe for each municipal right does allow full mitigation of steady state impacts in the Shelley to Near Blackfoot reach with credits remaining in the Ashton to Heise, Heise to Shelley and Near Blackfoot to Neeley reaches as shown.

Thanks!

Jason C. Helms, PE
JCH Engineering & Consulting, PLLC
208-308-2109

On Thu, Jan 5, 2023 at 12:18 PM Cefalo, James <James.Cefalo@idwr.idaho.gov> wrote:

Jason,

After our conversation last week, I spent some time evaluating different scenarios with the transfer tool to find the volume reduction needed to reach full mitigation at steady state. I have found the point where the transfer applications will offset each other (where the critical reaches will be fully mitigated at steady state). This email summarizes how I set up the three models and the annual pumping volumes used.

For the Farmland Reserve application (86715), I set up the model assuming a consumptive volume of 3.0 acre-feet per acre (223 af/trimester). For Applications 86712 and 86713, I assumed a historical consumptive use of 829 acre-feet at the

existing point of diversion for the 250 acres to be transferred to Ammon and Falls Water. Because the approved diversion volumes will likely be less than the maximum observed CIR, I would be willing to accept 829 acre-feet for modeling the historical diversions rather than the 818 acre-feet proposed in my previous email. 829 acre-feet represents the full 2013 CIR for the 250 acres. The 829 acre-feet was split proportionately between the applications: 663.2 acre-feet (221.1 af/trimester) for the City of Ammon application 165.8 acre-feet (55.3 af/trimester) for the Falls Water application. The models reflected the different priority dates for the two rights being transferred, with water right 35-7537 (83% of the volume) developed in 1975 and water right 35-13708 (full volume) coming online in 1984. I also used a centroid for Ammon and a centroid for Falls Water.

I found that the Shelley to Near Blackfoot reach is fully mitigated if Ammon and Falls Water are limited to 3.075 acre-feet per acre transferred. This equates to annual diversion volumes of 615 acre-feet for Ammon and 153.8 acre-feet for Falls Water. In both cases, the municipal providers could divert at their full authorized diversion rates continuously for approximately 105 days.

Up to now, our conversations have focused on steady state impacts. We have not really discussed the transient impacts resulting from the proposed changes. The incremental development periods proposed in Applications 86712 and 86713 (60% in 2023, 80% in 2024 and 95% in 2025) do not fully mitigate the transient impacts. The transient impacts must be brought below the steady state impacts for the reaches triggering mitigation. As I review the modeling results, the Shelley to Near Blackfoot reach is again the critical reach. If you address the transient impacts in the Shelley to Near Blackfoot Reach, the transient impacts in other reaches appear to be resolved too. There are many ways to structure an incremental development period. I want to leave it to you and Idaho Water Company to determine what would work best. As a reference point, as I ran the model for the City of Ammon application, I was able to eliminate the transient impacts (bring the transient impacts down to match the steady state impacts) by modeling zero diversion in 2023 and 2024 and 50% diversion from 2025-2028.

Please provide an updated transfer tool analysis for each application and a summary of how the steady state impacts are offset by the transfer application package. Feel free to use the volumes described above. Further, please provide an incremental development plan that fully resolves the transient state impacts (brings the transient state impacts equal to or below the maximum steady state impacts for the reaches requiring mitigation).

I wanted to make you aware of three other things I noticed as I reviewed the application files. First, none of the applications included a response to Question 5.c. This question asks whether the existing place of use is subject to any liens, deeds of trust, mortgages, or contracts. If the existing place of use is subject to any such encumbrances, the applicant must provide a letter from the holder of the secured interest, consenting to the changes. The existing place of use is subject to a mortgage contract held by Rabo Agrifinance (which can be found in the digital backfile for water right 35-7537). Rabo Agrifinance holds a security interest for

water rights 35-7537 and 35-13708. Before I can approve any of the transfers, I need a letter from Rabo Agrifinance consenting to the proposed changes.

Second, we appear to have the original Option Agreement between Idaho Water Company and Burtenshaw Land & Cattle. I don't know why we have the original, but we shouldn't. I have made a copy of the document. Please let me know how you would like to get the original back into your hands or back to Idaho Water Company.

Third, I discovered an error in the split of the diversion rate for water right 35-7537. Currently, water right 35-7537 authorizes a diversion rate of 6.99 cfs. Application 86712 proposes to transfer 2.96 cfs to the City of Ammon. Application 86713 proposes to transfer 0.74 cfs to Falls Water Company. This would leave 3.29 cfs available for Application 86715. However, Application 86715 proposes to transfer 3.30 cfs to Farmland Reserve. The rate for water right 35-7537 will be limited to 3.29 cfs if Application 86715 is approved.

Once I get the revised transfer tool analyses from you, and if the analyses fully address steady state and transient state impacts, I will prepare draft transfer approvals for you to review.

James



IDAHO DEPARTMENT OF
WATER RESOURCES

James Cefalo | Regional Manager

900 N Skyline Drive, Idaho Falls, ID 83402

(208) 525-7161 | www.idwr.idaho.gov

Idaho Water Company

Off-Setting Transfers 35-7537 & 35-13708

MODEL 1							
Cells this color are set up for user entries							
ENTER STARTING DATE FOR SIMULATION. THEN PUSH "UPDATE DATES" BUTTON		TRANSFER NO:					
YEAR		Idaho Water Co					
SEASON		1962		TRANSFER NAME:			200
		Burtenshaw					
ENTER CELL LOCATIONS:							
	'TO' CELL	'FROM1' CELL	'FROM2' CELL	'FROM3' CELL	35-7537	10/14/1975	664.69
ROW	76	55			35-13708	4/3/1984	135.31
COLUMN	163	159			Consumptive use fraction		82.9%
	City of Ammon	35-7537			Total Maximum CU		663.2
					Proposed CU		663.2
TRIMESTER OF ACTIVITY	TO WELL Projected Use AF/TRIMESTER	FROM1 WELL With Transfer AF/TRIMESTER	Without Transfer AF/TRIMESTER	FROM2 WELL With Transfer AF/TRIMESTER	Without Transfer AF/TRIMESTER	FROM3 WELL With Transfer AF/TRIMESTER	Without Transfer AF/TRIMESTER
WIN 1975	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SPR 1976	0.0	183.7	183.7	0.0	0.0	0.0	0.0
SUM 1976	0.0	183.7	183.7	0.0	0.0	0.0	0.0
WIN 1976	0.0	183.7	183.7	0.0	0.0	0.0	0.0
SPR 1977	0.0	183.7	183.7	0.0	0.0	0.0	0.0
WIN 1983	0.0	183.7	183.7	0.0	0.0	0.0	0.0
SPR 1984	0.0	221.1	221.1	0.0	0.0	0.0	0.0
SUM 1984	0.0	221.1	221.1	0.0	0.0	0.0	0.0
WIN 1984	0.0	221.1	221.1	0.0	0.0	0.0	0.0
SPR 1985	0.0	221.1	221.1	0.0	0.0	0.0	0.0
WIN 2022	0.0	221.1	221.1	0.0	0.0	0.0	0.0
SPR 2023	80.0	0.0	221.1	0.0	0.0	0.0	0.0
SUM 2023	80.0	0.0	221.1	0.0	0.0	0.0	0.0
WIN 2023	80.0	0.0	221.1	0.0	0.0	0.0	0.0
SPR 2024	160.0	0.0	221.1	0.0	0.0	0.0	0.0
SUM 2024	160.0	0.0	221.1	0.0	0.0	0.0	0.0
WIN 2024	160.0	0.0	221.1	0.0	0.0	0.0	0.0
SPR 2025	160.0	0.0	221.1	0.0	0.0	0.0	0.0
SUM 2025	160.0	0.0	221.1	0.0	0.0	0.0	0.0
WIN 2025	160.0	0.0	221.1	0.0	0.0	0.0	0.0
SPR 2026	205.0	0.0	221.1	0.0	0.0	0.0	0.0
SUM 2026	205.0	0.0	221.1	0.0	0.0	0.0	0.0
WIN 2026	205.0	0.0	221.1	0.0	0.0	0.0	0.0
SPR 2027	205.0	0.0	221.1	0.0	0.0	0.0	0.0
SUM 2027	205.0	0.0	221.1	0.0	0.0	0.0	0.0
WIN 2027	205.0	0.0	221.1	0.0	0.0	0.0	0.0
SPR 2028	205.0	0.0	221.1	0.0	0.0	0.0	0.0
SUM 2028	205.0	0.0	221.1	0.0	0.0	0.0	0.0
WIN 2028	205.0	0.0	221.1	0.0	0.0	0.0	0.0
SPR 2029	205.0	0.0	221.1	0.0	0.0	0.0	0.0
SUM 2029	205.0	0.0	221.1	0.0	0.0	0.0	0.0
WIN 2029	205.0	0.0	221.1	0.0	0.0	0.0	0.0
SPR 2030	205.0	0.0	221.1	0.0	0.0	0.0	0.0
SUM 2109	205.0	0.0	221.1	0.0	0.0	0.0	0.0
WIN 2109	205.0	0.0	221.1	0.0	0.0	0.0	0.0
SPR 2110	205.0	0.0	221.1	0.0	0.0	0.0	0.0
SUM 2110	205.0	0.0	221.1	0.0	0.0	0.0	0.0
WIN 2110	205.0	0.0	221.1	0.0	0.0	0.0	0.0
SPR 2111	205.0	0.0	221.1	0.0	0.0	0.0	0.0
SUM 2111	205.0	0.0	221.1	0.0	0.0	0.0	0.0
WIN 2111	205.0	0.0	221.1	0.0	0.0	0.0	0.0

Idaho Water Company

Off-Setting Transfers 35-7537 & 35-13708

MODEL 2																																				
Cells this color are set up for user entries																																				
ENTER STARTING DATE FOR SIMULATION. THEN PUSH "UPDATE DATES" BUTTON YEAR: 1962 SEASON:		TRANSFER NO: Idaho Water Co TRANSFER NAME: Burtenshaw	50.00																																	
ENTER CELL LOCATIONS: <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 10%;">ROW</th> <th style="width: 15%;">'TO' CELL</th> <th style="width: 15%;">'FROM1' CELL</th> <th style="width: 15%;">'FROM2' CELL</th> <th style="width: 15%;">'FROM3' CELL</th> </tr> <tr> <td>COLUMN</td> <td>74</td> <td>55</td> <td></td> <td></td> </tr> <tr> <td></td> <td>164</td> <td>159</td> <td></td> <td></td> </tr> </table>		ROW	'TO' CELL	'FROM1' CELL	'FROM2' CELL	'FROM3' CELL	COLUMN	74	55				164	159			<table style="width: 100%;"> <tr> <td>35-7537</td> <td>10/14/1975</td> <td>166.2</td> </tr> <tr> <td>35-13708</td> <td>4/3/1984</td> <td>33.8</td> </tr> <tr> <td colspan="2">Consumptive use fraction</td> <td>0.829</td> </tr> <tr> <td colspan="2">Total Maximum CU</td> <td>165.80</td> </tr> <tr> <td colspan="2">Proposed CU</td> <td>165.80</td> </tr> </table>					35-7537	10/14/1975	166.2	35-13708	4/3/1984	33.8	Consumptive use fraction		0.829	Total Maximum CU		165.80	Proposed CU		165.80
ROW	'TO' CELL	'FROM1' CELL	'FROM2' CELL	'FROM3' CELL																																
COLUMN	74	55																																		
	164	159																																		
35-7537	10/14/1975	166.2																																		
35-13708	4/3/1984	33.8																																		
Consumptive use fraction		0.829																																		
Total Maximum CU		165.80																																		
Proposed CU		165.80																																		
Falls Water Co 35-7537																																				
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																													
WIN 1975	0.00	0.00	0.00	0.00	0.00	0.00	0.00																													
SPR 1976	0.00	45.92	45.92	0.00	0.00	0.00	0.00																													
SUM 1976	0.00	45.92	45.92	0.00	0.00	0.00	0.00																													
WIN 1976	0.00	45.92	45.92	0.00	0.00	0.00	0.00																													
SPR 1977	0.00	45.92	45.92	0.00	0.00	0.00	0.00																													
WIN 1983	0.00	45.92	45.92	0.00	0.00	0.00	0.00																													
SPR 1984	0.00	55.27	55.27	0.00	0.00	0.00	0.00																													
SUM 1984	0.00	55.27	55.27	0.00	0.00	0.00	0.00																													
WIN 1984	0.00	55.27	55.27	0.00	0.00	0.00	0.00																													
SPR 1985	0.00	55.27	55.27	0.00	0.00	0.00	0.00																													
WIN 2022	0.00	55.27	55.27	0.00	0.00	0.00	0.00																													
SPR 2023	20.00	0.00	55.27	0.00	0.00	0.00	0.00																													
SUM 2023	20.00	0.00	55.27	0.00	0.00	0.00	0.00																													
WIN 2023	20.00	0.00	55.27	0.00	0.00	0.00	0.00																													
SPR 2024	48.00	0.00	55.27	0.00	0.00	0.00	0.00																													
SUM 2024	48.00	0.00	55.27	0.00	0.00	0.00	0.00																													
WIN 2024	48.00	0.00	55.27	0.00	0.00	0.00	0.00																													
SPR 2025	48.00	0.00	55.27	0.00	0.00	0.00	0.00																													
SUM 2025	48.00	0.00	55.27	0.00	0.00	0.00	0.00																													
WIN 2025	48.00	0.00	55.27	0.00	0.00	0.00	0.00																													
SPR 2026	51.25	0.00	55.27	0.00	0.00	0.00	0.00																													
SUM 2026	51.25	0.00	55.27	0.00	0.00	0.00	0.00																													
WIN 2026	51.25	0.00	55.27	0.00	0.00	0.00	0.00																													
SPR 2027	51.25	0.00	55.27	0.00	0.00	0.00	0.00																													
SUM 2027	51.25	0.00	55.27	0.00	0.00	0.00	0.00																													
WIN 2027	51.25	0.00	55.27	0.00	0.00	0.00	0.00																													
SPR 2028	51.25	0.00	55.27	0.00	0.00	0.00	0.00																													
SUM 2028	51.25	0.00	55.27	0.00	0.00	0.00	0.00																													
WIN 2028	51.25	0.00	55.27	0.00	0.00	0.00	0.00																													
SPR 2029	51.25	0.00	55.27	0.00	0.00	0.00	0.00																													
SUM 2029	51.25	0.00	55.27	0.00	0.00	0.00	0.00																													
WIN 2029	51.25	0.00	55.27	0.00	0.00	0.00	0.00																													
SPR 2030	51.25	0.00	55.27	0.00	0.00	0.00	0.00																													
SUM 2109	51.25	0.00	55.27	0.00	0.00	0.00	0.00																													
WIN 2109	51.25	0.00	55.27	0.00	0.00	0.00	0.00																													
SPR 2110	51.25	0.00	55.27	0.00	0.00	0.00	0.00																													
SUM 2110	51.25	0.00	55.27	0.00	0.00	0.00	0.00																													
WIN 2110	51.25	0.00	55.27	0.00	0.00	0.00	0.00																													
SPR 2111	51.25	0.00	55.27	0.00	0.00	0.00	0.00																													
SUM 2111	51.25	0.00	55.27	0.00	0.00	0.00	0.00																													
WIN 2111	51.25	0.00	55.27	0.00	0.00	0.00	0.00																													

Idaho Water Company
Off-Setting Transfers 35-7537 & 35-13708

MODEL 3							
Cells this color are set up for user entries							
ENTER STARTING DATE FOR SIMULATION. THEN PUSH "UPDATE DATES" BUTTON		TRANSFER NO:					
YEAR 1962		Idaho Water Co					
SEASON		TRANSFER NAME:					223
		Burtenshaw					
ENTER CELL LOCATIONS:							
	'TO' CELL	'FROM1' CELL	'FROM2' CELL	'FROM3' CELL	35-7537	10/14/1975	741.1331924
ROW	84	55			35-13708	4/3/1984	150.8668076
COLUMN	94	159			Consumptive use fraction (3/4)		0.750
						Total Maximum CU	669.0
	Canyon Falls Farm	35-7537				Proposed CU	669
TRIMESTER OF ACTIVITY	TO WELL Projected Use AF/TRIMESTER	FROM1 WELL With Transfer AF/TRIMESTER	Without Transfer AF/TRIMESTER	FROM2 WELL With Transfer AF/TRIMESTER	Without Transfer AF/TRIMESTER	FROM3 WELL With Transfer AF/TRIMESTER	Without Transfer AF/TRIMESTER
WIN 1975	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SPR 1976	0.0	185.3	185.3	0.0	0.0	0.0	0.0
SUM 1976	0.0	185.3	185.3	0.0	0.0	0.0	0.0
WIN 1976	0.0	185.3	185.3	0.0	0.0	0.0	0.0
SPR 1977	0.0	185.3	185.3	0.0	0.0	0.0	0.0
WIN 1983	0.0	185.3	185.3	0.0	0.0	0.0	0.0
SPR 1984	0.0	223.0	223.0	0.0	0.0	0.0	0.0
SUM 1984	0.0	223.0	223.0	0.0	0.0	0.0	0.0
WIN 1984	0.0	223.0	223.0	0.0	0.0	0.0	0.0
SPR 1985	0.0	223.0	223.0	0.0	0.0	0.0	0.0
WIN 2022	0.0	223.0	223.0	0.0	0.0	0.0	0.0
SPR 2023	208.0	0.0	223.0	0.0	0.0	0.0	0.0
SUM 2023	208.0	0.0	223.0	0.0	0.0	0.0	0.0
WIN 2023	208.0	0.0	223.0	0.0	0.0	0.0	0.0
SPR 2024	223.0	0.0	223.0	0.0	0.0	0.0	0.0
SUM 2024	223.0	0.0	223.0	0.0	0.0	0.0	0.0
WIN 2024	223.0	0.0	223.0	0.0	0.0	0.0	0.0
SPR 2025	223.0	0.0	223.0	0.0	0.0	0.0	0.0
SUM 2025	223.0	0.0	223.0	0.0	0.0	0.0	0.0
WIN 2025	223.0	0.0	223.0	0.0	0.0	0.0	0.0
SPR 2026	223.0	0.0	223.0	0.0	0.0	0.0	0.0
SUM 2026	223.0	0.0	223.0	0.0	0.0	0.0	0.0
WIN 2026	223.0	0.0	223.0	0.0	0.0	0.0	0.0
SPR 2027	223.0	0.0	223.0	0.0	0.0	0.0	0.0
SUM 2027	223.0	0.0	223.0	0.0	0.0	0.0	0.0
WIN 2027	223.0	0.0	223.0	0.0	0.0	0.0	0.0
SPR 2028	223.0	0.0	223.0	0.0	0.0	0.0	0.0
SUM 2028	223.0	0.0	223.0	0.0	0.0	0.0	0.0
WIN 2028	223.0	0.0	223.0	0.0	0.0	0.0	0.0
SPR 2029	223.0	0.0	223.0	0.0	0.0	0.0	0.0
SUM 2029	223.0	0.0	223.0	0.0	0.0	0.0	0.0
WIN 2029	223.0	0.0	223.0	0.0	0.0	0.0	0.0
SPR 2030	223.0	0.0	223.0	0.0	0.0	0.0	0.0
SUM 2109	223.0	0.0	223.0	0.0	0.0	0.0	0.0
WIN 2109	223.0	0.0	223.0	0.0	0.0	0.0	0.0
SPR 2110	223.0	0.0	223.0	0.0	0.0	0.0	0.0
SUM 2110	223.0	0.0	223.0	0.0	0.0	0.0	0.0
WIN 2110	223.0	0.0	223.0	0.0	0.0	0.0	0.0
SPR 2111	223.0	0.0	223.0	0.0	0.0	0.0	0.0
SUM 2111	223.0	0.0	223.0	0.0	0.0	0.0	0.0
WIN 2111	223.0	0.0	223.0	0.0	0.0	0.0	0.0

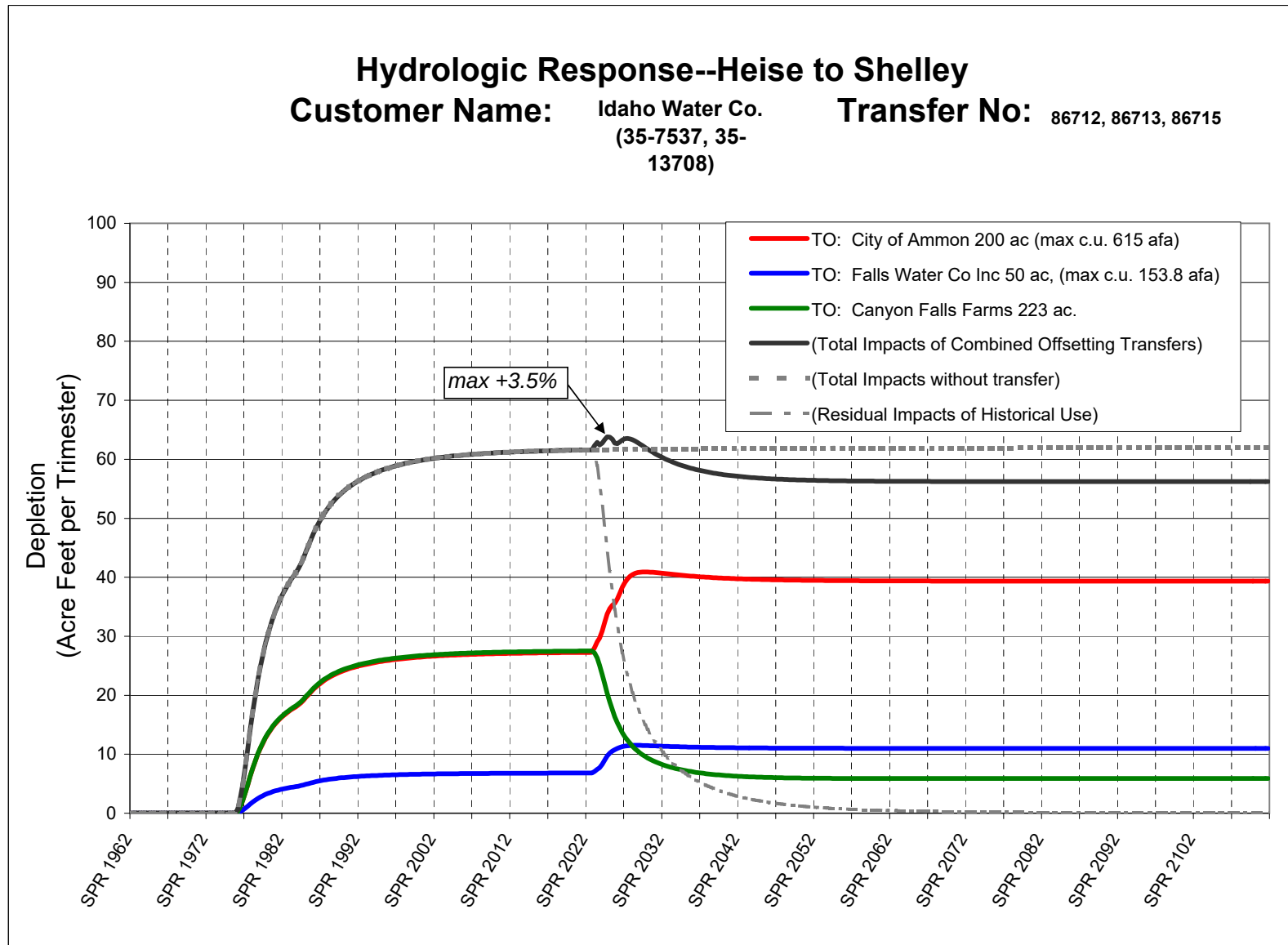
City of Ammon (200 Ac C.U. limited to 615 afa) 3 year mitigation schedule to maintain transient increase below 5% over historical in Shelley to Near Blackfoot reach

Falls Water Co (50 Ac C.U. limited to 153.8 afa) 3 year mitigation schedule to maintain transient increase below 5% over historical in Heise to Shelley reach

Canyon Falls Farms (223 Ac to 84,94): set aside 15 acres year one, to maintain transient increase below 5% over historical in Near Blackfoot to Neeley reach

mitigation-analysis-tool-ammon falls limit.xls

Changes to ESPA Reach Impacts Resulting From Proposed Off-Setting Transfers

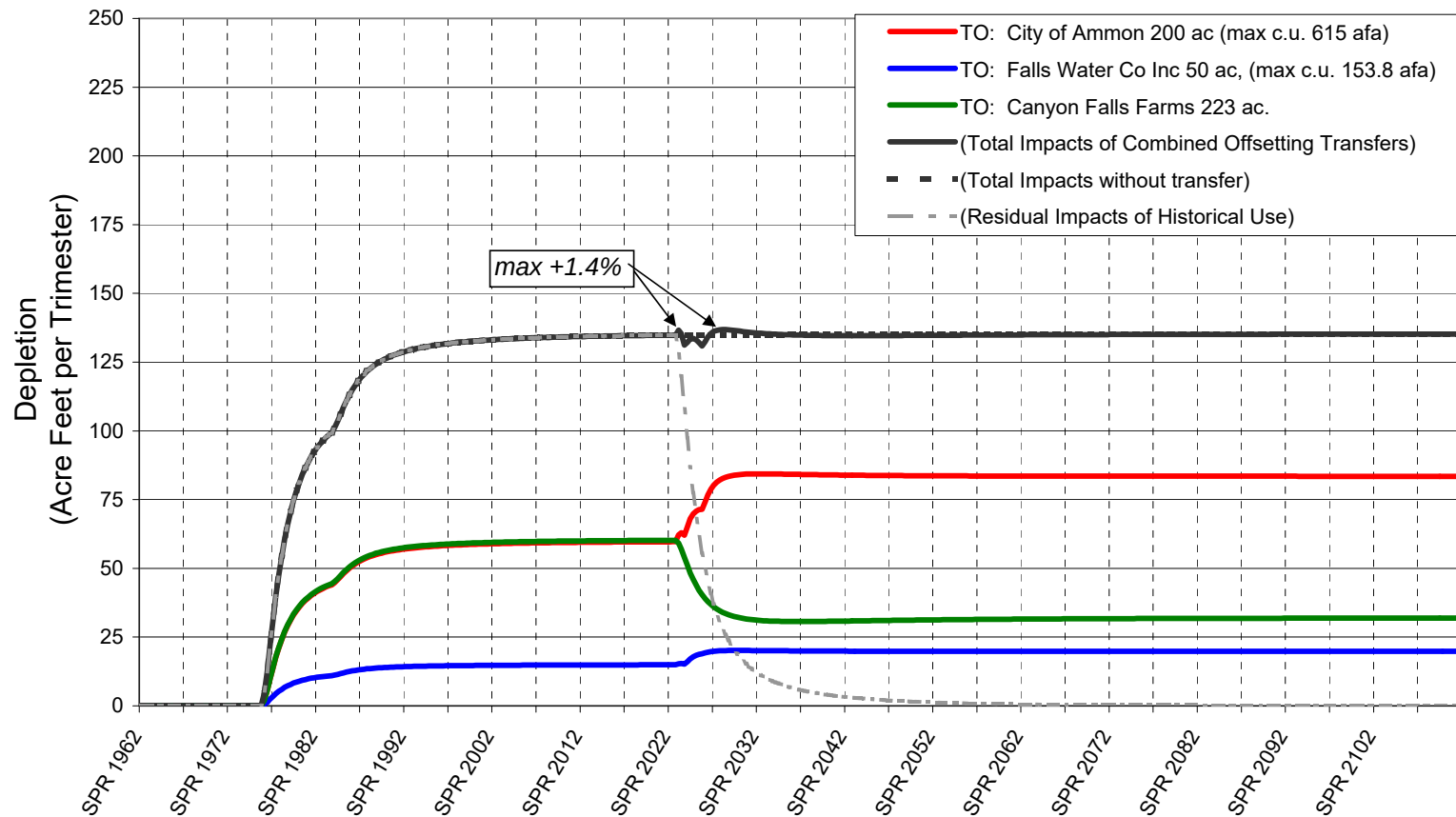


Changes to ESPA Reach Impacts Resulting From Proposed Off-Setting Transfers

Hydrologic Response--Shelley to Near Blackfoot

Customer Name: Idaho Water Co.
(35-7537, 35-13708)

Transfer No: 86712, 86713, 86715



Changes to ESPA Reach Impacts Resulting From Proposed Off-Setting Transfers

Hydrologic Response--Near Blackfoot to Neeley

Customer Name: Idaho Water Co.
(35-7537, 35-
13708)

Transfer No: 86712, 86713, 86715

