

Jordan, Blake

From: Jason Helms [jasoncivil@alumni.nd.edu]
Sent: Monday, August 20, 2012 3:21 PM
To: Jordan, Blake
Subject: Re: City of Ammon Water Use Information (ESPA analysis)
Attachments: 35-14162_ESPA_Ammon_Centroid.pdf

Blake,

I have attached the details of the revised analysis utilizing the weighted centroid of City of Ammon diversions from the WMIS data available.

Look it over and let me know if there are any issues.

Thanks,

Jason C. Helms, P.E.

JCH Engineering & Consulting, PLLC
(208) 308-2109

On Mon, Aug 6, 2012 at 9:30 AM, Jordan, Blake <Blake.Jordan@idwr.idaho.gov> wrote:

Jason,

Attached is a link to our water management database where you can look up ground water use information for diversions within a water district. You should be able to find water use information for the majority of the city of Ammon wells. Some of the cities wells fall outside a water district and information may be limited or unavailable. The City of Ammon should have metal tag #'s or Water Management Information System #'s(WMIS) for each diversion they own.

<http://www.idwr.idaho.gov/Apps/WM/WMIS/>

Blake

Idaho Water Company Off-Setting Transfers 35-14162

MODEL 1							
Data Entry: Residual and additional new impacts resulting from transfer of 35-14162							
TO The City of Ammon Diversion Centroid located within TWP 2N, RNG. 38E, Section 27							
Cells this color are set up for user entries							
ENTER STARTING DATE FOR SIMULATION. THEN PUSH "UPDATE DATES" BUTTON							
YEAR		1973		TRANSFER NO:		TO: City of Am	
SEASON		35-14162		TRANSFER NAME:			
ENTER CELL LOCATIONS:							
ROW COLUMN	'TO' CELL	'FROM1' CELL	'FROM2' CELL	'FROM3' CELL	Water Right	Priority Date	Transfer Volume
	75	69			35-14162	7/19/1973	60.0
	163	131				Total	60.0
	2N38E-27	1S33E-22					
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	
SPR 1973	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SUM 1973	0.0	20.0	20.0	0.0	0.0	0.0	0.0
WIN 1973	0.0	20.0	20.0	0.0	0.0	0.0	0.0
SPR 1974	0.0	20.0	20.0	0.0	0.0	0.0	0.0
SUM 1974	0.0	20.0	20.0	0.0	0.0	0.0	0.0
WIN 1974	0.0	20.0	20.0	0.0	0.0	0.0	0.0
SPR 1975	0.0	20.0	20.0	0.0	0.0	0.0	0.0
WIN 2010	0.0	20.0	20.0	0.0	0.0	0.0	0.0
SPR 2011	0.0	20.0	20.0	0.0	0.0	0.0	0.0
SUM 2011	0.0	20.0	20.0	0.0	0.0	0.0	0.0
WIN 2011	0.0	20.0	20.0	0.0	0.0	0.0	0.0
SPR 2012	0.0	20.0	20.0	0.0	0.0	0.0	0.0
SUM 2012	20.0	0.0	20.0	0.0	0.0	0.0	0.0
WIN 2012	20.0	0.0	20.0	0.0	0.0	0.0	0.0
SPR 2013	20.0	0.0	20.0	0.0	0.0	0.0	0.0
SUM 2013	20.0	0.0	20.0	0.0	0.0	0.0	0.0
WIN 2013	20.0	0.0	20.0	0.0	0.0	0.0	0.0
SUM 2120	20.0	0.0	20.0	0.0	0.0	0.0	0.0
WIN 2120	20.0	0.0	20.0	0.0	0.0	0.0	0.0
SPR 2121	20.0	0.0	20.0	0.0	0.0	0.0	0.0
SUM 2121	20.0	0.0	20.0	0.0	0.0	0.0	0.0
WIN 2121	20.0	0.0	20.0	0.0	0.0	0.0	0.0
SPR 2122	20.0	0.0	20.0	0.0	0.0	0.0	0.0
SUM 2122	20.0	0.0	20.0	0.0	0.0	0.0	0.0
WIN 2122	20.0	0.0	20.0	0.0	0.0	0.0	0.0

Idaho Water Company Off-Setting Transfers 35-14162

MODEL 2							
Data Entry: Residual and additional new impacts resulting from transfer of 35-14162							
TO County Line Farms within TWP 6S, RNG. 29E, Section 12							
Cells this color are set up for user entries							
ENTER STARTING DATE FOR SIMULATION. THEN PUSH "UPDATE DATES" BUTTON							
TRANSFER NO:		County Line Farms					
YEAR		1973		TRANSFER NAME:			
SEASON		1		35-14162			
ENTER CELL LOCATIONS:							
	'TO' CELL	'FROM1' CELL	'FROM2' CELL	'FROM3' CELL	Water Right	Priority Date	Transfer Volume
ROW	82	69			35-14162	7/19/1973	310.0
COLUMN	97	131				Total	310.0
	6S29E-12	1S33E-22					
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	
SPR 1973	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SUM 1973	0.0	103.3	103.3	0.0	0.0	0.0	0.0
WIN 1973	0.0	103.3	103.3	0.0	0.0	0.0	0.0
SPR 1974	0.0	103.3	103.3	0.0	0.0	0.0	0.0
SUM 1974	0.0	103.3	103.3	0.0	0.0	0.0	0.0
WIN 1974	0.0	103.3	103.3	0.0	0.0	0.0	0.0
SPR 1975	0.0	103.3	103.3	0.0	0.0	0.0	0.0
WIN 2010	0.0	103.3	103.3	0.0	0.0	0.0	0.0
SPR 2011	0.0	103.3	103.3	0.0	0.0	0.0	0.0
SUM 2011	0.0	103.3	103.3	0.0	0.0	0.0	0.0
WIN 2011	0.0	103.3	103.3	0.0	0.0	0.0	0.0
SPR 2012	0.0	103.3	103.3	0.0	0.0	0.0	0.0
SUM 2012	103.3	0.0	103.3	0.0	0.0	0.0	0.0
WIN 2012	103.3	0.0	103.3	0.0	0.0	0.0	0.0
SPR 2013	103.3	0.0	103.3	0.0	0.0	0.0	0.0
SUM 2013	103.3	0.0	103.3	0.0	0.0	0.0	0.0
WIN 2013	103.3	0.0	103.3	0.0	0.0	0.0	0.0
SUM 2120	103.3	0.0	103.3	0.0	0.0	0.0	0.0
WIN 2120	103.3	0.0	103.3	0.0	0.0	0.0	0.0
SPR 2121	103.3	0.0	103.3	0.0	0.0	0.0	0.0
SUM 2121	103.3	0.0	103.3	0.0	0.0	0.0	0.0
WIN 2121	103.3	0.0	103.3	0.0	0.0	0.0	0.0
SPR 2122	103.3	0.0	103.3	0.0	0.0	0.0	0.0
SUM 2122	103.3	0.0	103.3	0.0	0.0	0.0	0.0
WIN 2122	103.3	0.0	103.3	0.0	0.0	0.0	0.0

Idaho Water Company
Off-Setting Transfers 35-14162

MODEL 3							
Data Entry: Residual and additional new impacts resulting from transfer of 35-14162							
TO Country Club Hills within TWP 1N, RNG. 38E, Section 28							
Cells this color are set up for user entries							
ENTER STARTING DATE FOR SIMULATION. THEN PUSH "UPDATE DATES" BUTTON							
YEAR		1973		TRANSFER NO:		Country Club Hills	
SEASON		1		TRANSFER NAME:		35-14162	
ENTER CELL LOCATIONS:							
	TO CELL	FROM1' CELL	FROM2' CELL	FROM3' CELL	Water Right	Priority Date	Transfer Volume
ROW	80	69			35-14162	7/19/1973	56.0
COLUMN	159	131				Total	56.0
	1N38E-28	1S33E-22					
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
SPR 1973	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SUM 1973	0.0	18.7	18.7	0.0	0.0	0.0	0.0
WIN 1973	0.0	18.7	18.7	0.0	0.0	0.0	0.0
SPR 1974	0.0	18.7	18.7	0.0	0.0	0.0	0.0
SUM 1974	0.0	18.7	18.7	0.0	0.0	0.0	0.0
WIN 1974	0.0	18.7	18.7	0.0	0.0	0.0	0.0
SPR 1975	0.0	18.7	18.7	0.0	0.0	0.0	0.0
WIN 2010	0.0	18.7	18.7	0.0	0.0	0.0	0.0
SPR 2011	0.0	18.7	18.7	0.0	0.0	0.0	0.0
SUM 2011	0.0	18.7	18.7	0.0	0.0	0.0	0.0
WIN 2011	0.0	18.7	18.7	0.0	0.0	0.0	0.0
SPR 2012	0.0	18.7	18.7	0.0	0.0	0.0	0.0
SUM 2012	18.7	0.0	18.7	0.0	0.0	0.0	0.0
WIN 2012	18.7	0.0	18.7	0.0	0.0	0.0	0.0
SPR 2013	18.7	0.0	18.7	0.0	0.0	0.0	0.0
SUM 2013	18.7	0.0	18.7	0.0	0.0	0.0	0.0
WIN 2013	18.7	0.0	18.7	0.0	0.0	0.0	0.0
SUM 2120	18.7	0.0	18.7	0.0	0.0	0.0	0.0
WIN 2120	18.7	0.0	18.7	0.0	0.0	0.0	0.0
SPR 2121	18.7	0.0	18.7	0.0	0.0	0.0	0.0
SUM 2121	18.7	0.0	18.7	0.0	0.0	0.0	0.0
WIN 2121	18.7	0.0	18.7	0.0	0.0	0.0	0.0
SPR 2122	18.7	0.0	18.7	0.0	0.0	0.0	0.0
SUM 2122	18.7	0.0	18.7	0.0	0.0	0.0	0.0
WIN 2122	18.7	0.0	18.7	0.0	0.0	0.0	0.0

Idaho Water Company Off-Setting Transfers 35-14162

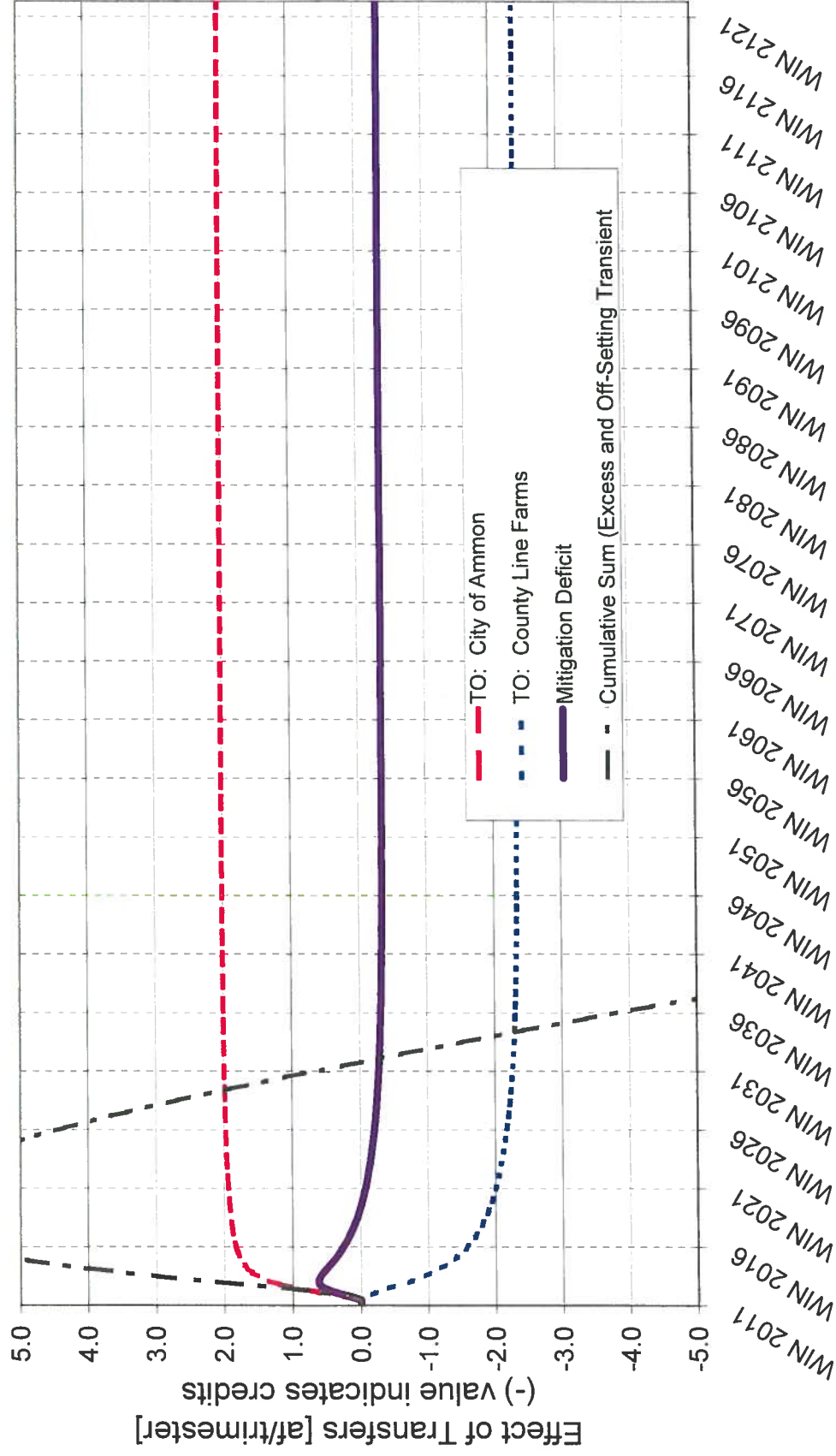
MODEL 4							
Data Entry: Residual and additional new impacts resulting from transfer of 35-14162							
TO Jefferson County Lake within TWP 4N, RNG.39E, Section 5							
Cells this color are set up for user entries							
ENTER STARTING DATE FOR SIMULATION. THEN PUSH "UPDATE DATES" BUTTO							
TRANSFER NO:		Jefferson Lake					
YEAR		1973		TRANSFER NAME:			
SEASON		35-14162					
ENTER CELL LOCATIONS:							
	'TO' CELL	'FROM1' CELL	'FROM2' CELL	'FROM3' CELL			
ROW	64	69			35-14162	7/19/1973	10.0
COLUMN	173	131				Total	10.0
	4N39E-5	1S33E-22					
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
SPR 1973	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SUM 1973	0.0	3.3	3.3	0.0	0.0	0.0	0.0
WIN 1973	0.0	3.3	3.3	0.0	0.0	0.0	0.0
SPR 1974	0.0	3.3	3.3	0.0	0.0	0.0	0.0
SUM 1974	0.0	3.3	3.3	0.0	0.0	0.0	0.0
WIN 1974	0.0	3.3	3.3	0.0	0.0	0.0	0.0
SPR 1975	0.0	3.3	3.3	0.0	0.0	0.0	0.0
WIN 2010	0.0	3.3	3.3	0.0	0.0	0.0	0.0
SPR 2011	0.0	3.3	3.3	0.0	0.0	0.0	0.0
SUM 2011	0.0	3.3	3.3	0.0	0.0	0.0	0.0
WIN 2011	0.0	3.3	3.3	0.0	0.0	0.0	0.0
SPR 2012	0.0	3.3	3.3	0.0	0.0	0.0	0.0
SUM 2012	3.3	0.0	3.3	0.0	0.0	0.0	0.0
WIN 2012	3.3	0.0	3.3	0.0	0.0	0.0	0.0
SPR 2013	3.3	0.0	3.3	0.0	0.0	0.0	0.0
SUM 2013	3.3	0.0	3.3	0.0	0.0	0.0	0.0
WIN 2013	3.3	0.0	3.3	0.0	0.0	0.0	0.0
SUM 2120	3.3	0.0	3.3	0.0	0.0	0.0	0.0
WIN 2120	3.3	0.0	3.3	0.0	0.0	0.0	0.0
SPR 2121	3.3	0.0	3.3	0.0	0.0	0.0	0.0
SUM 2121	3.3	0.0	3.3	0.0	0.0	0.0	0.0
WIN 2121	3.3	0.0	3.3	0.0	0.0	0.0	0.0
SPR 2122	3.3	0.0	3.3	0.0	0.0	0.0	0.0
SUM 2122	3.3	0.0	3.3	0.0	0.0	0.0	0.0
WIN 2122	3.3	0.0	3.3	0.0	0.0	0.0	0.0

HEISE - SHELLEY Transient Impacts

Net Reach Impacts Based on Significant Impacts and Off-Setting Credits

Customer Name: Idaho Water Co. (35-14162) Transfer No:

Off-Setting



HEISE-SHELLEY
OFF-SETTING IMPACTS

JCH - 8/10/2012
WEIGHTED CENTROID

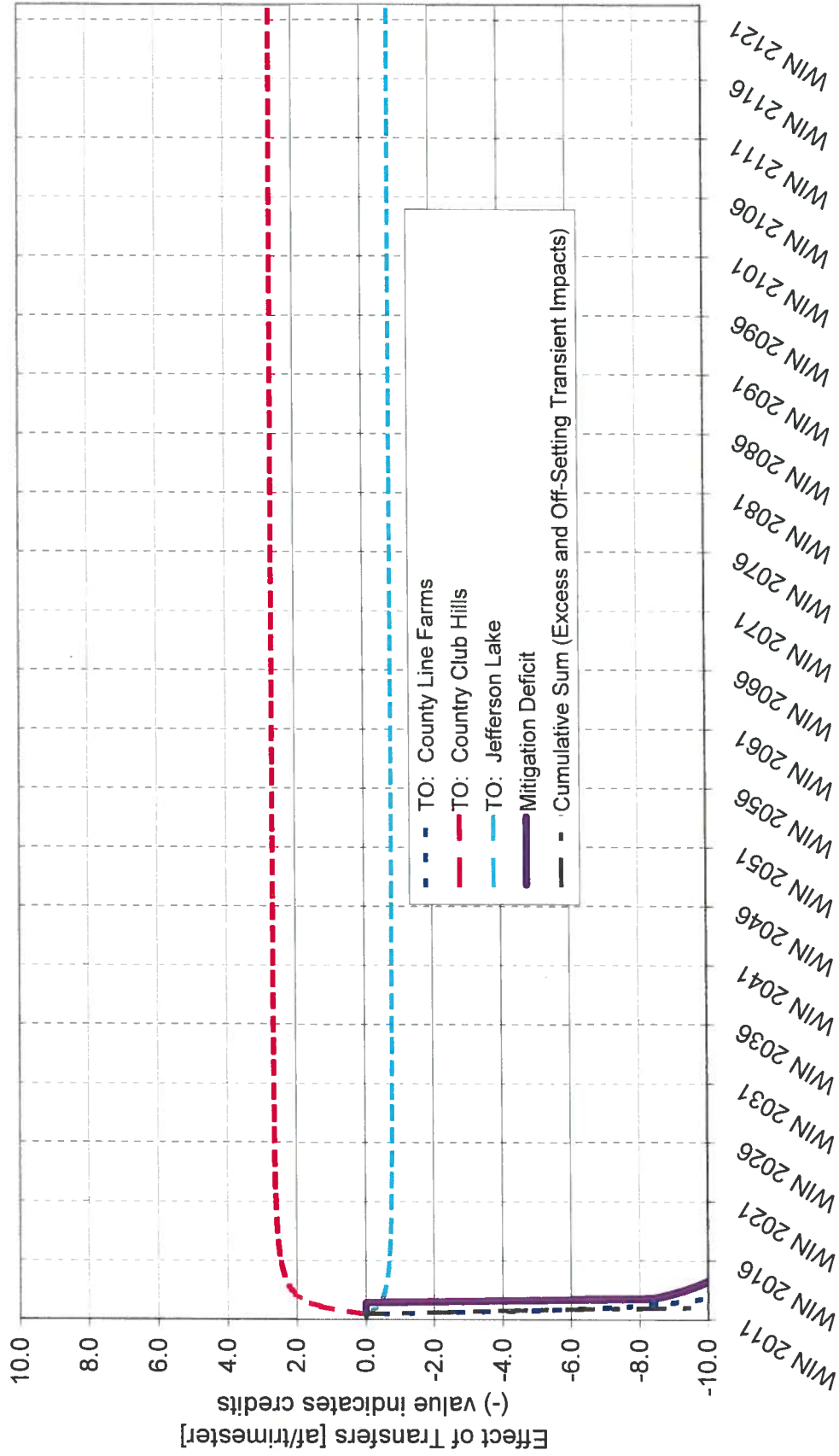
SHELLEY - NEAR BLACKFOOT Transient Impacts Net Reach Impacts Based on Significant Impacts and Off-Setting Credits

Customer Name:

Transfer No:

Idaho Water Co. (35-14162)

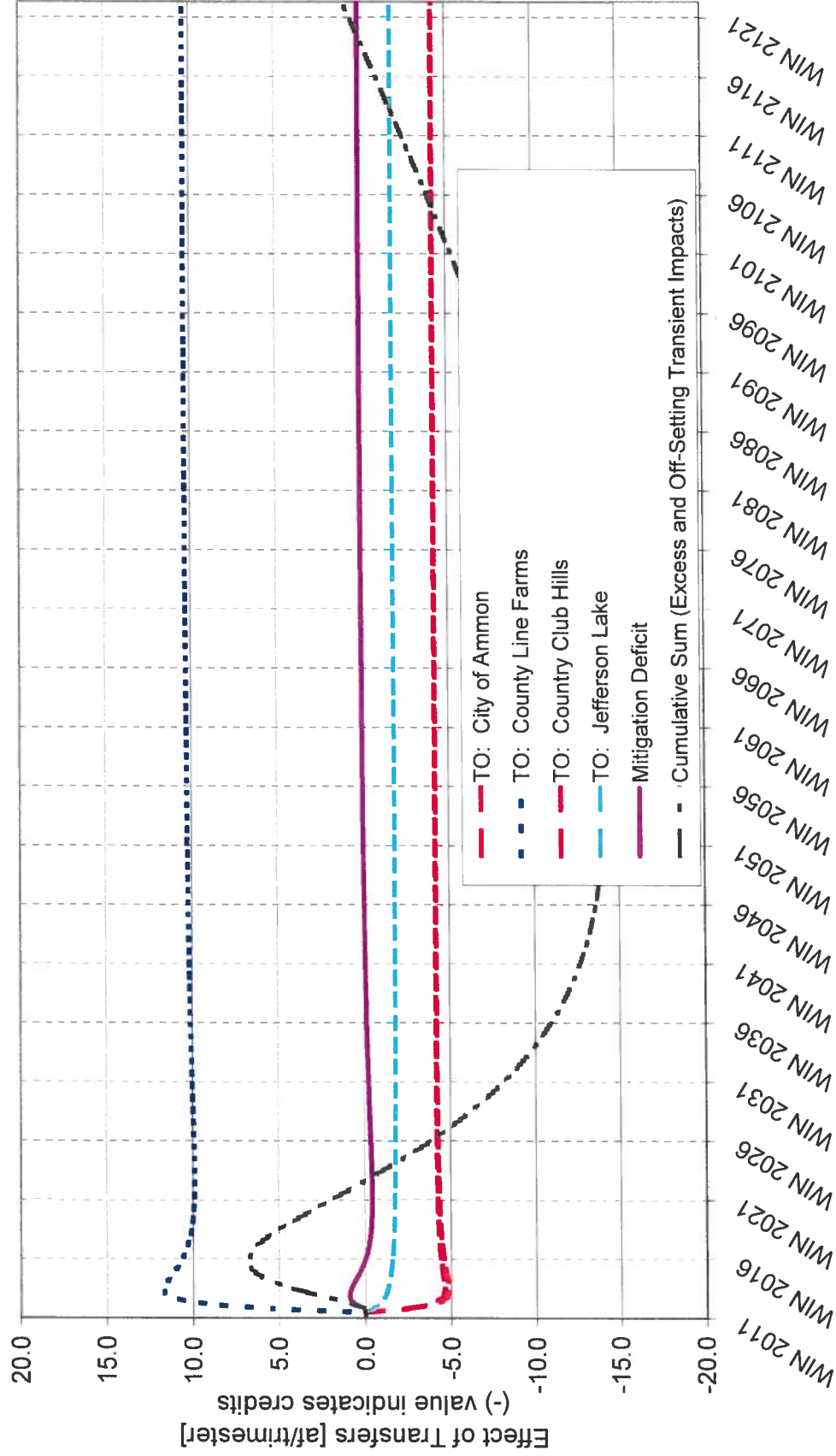
Off-Setting



NEAR BLACKFOOT - NEELEY Transient Impacts

Net Reach Impacts Based on Significant Impacts and Off-Setting Credits

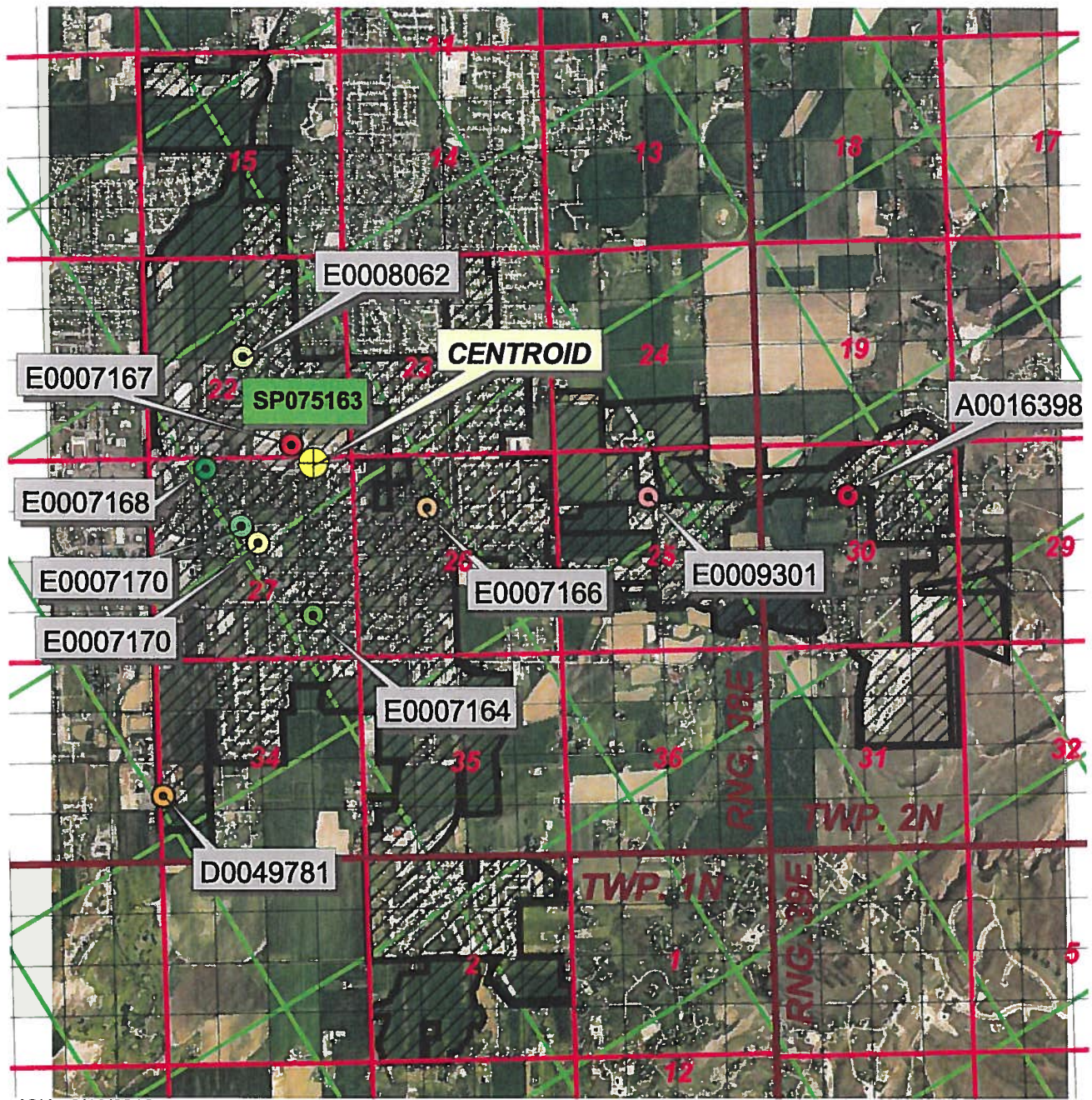
Customer Name: Idaho Water Co. (35-14162) Transfer No: Off-Setting



Metal Tag Number	Twp	Rge	Sec	1/4	1/4	1/4	Northing [m]	Easting [m]	2002 [af]	2003 [af]	2004 [af]	2005 [af]	2006 [af]	2007 [af]	2008 [af]	2009 [af]	2010 [af]	2011 [af]	Total [af]	AVERAGE [afa]	North Weight	East Weight	
E0008062	02N	38E	22	SE	SE	NW	1367370.1	2663769.4	1121.4	1024.6	1015.2	870.8	633.9	633.9	1650.1	1456.6	1232.5	929.2	10568.1	1056.8	14450517944.6	28151008350.9	
E0007167	02N	38E	22	SE	SW	SE	1366674.5	2664152.1	358.4	565.4	442.7	2218.9	2218.9	2218.9	894.5	655.0	577.7	760.3	10910.7	1091.1	14911388915.7	29067790413.5	
E0009301	02N	38E	25	SE	NE	NW	1366263.1	2666990.9					1021.0	1021.0	438.8	502.0		723.6	3706.4	741.3	5063931364.7	9884961741.7	
E0007166	02N	38E	26	NW	SE	NW	1366175.9	2665227.0	654.3	639.8	802.1	681.9	839.7	839.7	637.1	137.1	0.0	99.0	5330.6	533.1	7282591899.6	14207365602.0	
E0007170	02N	38E	27	SW	SW	NE	1365895.6	2663881.7	193.7	46.7	36.7	35.8	3435.0	3435.0	457.2	473.1	0.0	0.0	8113.2	811.3	11081743042.8	21612524686.3	
E0007168	02N	38E	27	NW	NE	NW	1366485.6	2663471.4				543.0	543.0	543.0	188.7	29.7	21.5	182.0	2050.9	293.0	2802470616.6	5462406852.9	
E0007169	02N	38E	27	NE	SE	NW	1366027.3	2663747.8	227.8	259.1	322.3	65.4	242.5	242.5	198.4	28.8	25.4	16.2	1628.4	162.8	2224397841.9	4337566923.7	
E0007164	02N	38E	27	NW	SE	SE	1365321.5	2664317.0										0.0	0.0	0.0	0.0	0.0	
D0049781	02N	38E	34	SW	NW	SW	1363888.9	2663121.8										547.5	547.5	547.5	746674639.1	1457952649.7	
A0016398	02N	39E	30	NE	SE	NW	1366274.8	2668584.0										0.0	0.0	0.0	0.0	0.0	
CENTROID	02N	38E	27	NW	NE	NE	1366531.8	2664324.6	2555.6	2535.6	2618.9	4415.7	8934.0	8934.0	4464.9	3282.2	1857.2	3257.7	42855.7	5236.8	58563716265.0	114181577220.5	
							Calculated Centroid																

Table 1: City of Ammon
Calculated Centroid of Diversions

City of Ammon Calculated Centroid of Historical Diversions



JCH - 8/10/2012

2009 NAIP Aerial Photo

0.5 0 0.5 1 Miles

City of Ammon Wells
(Metal Tag# Shown)

ESPA Model Grid
Township & Range
Sections
40s
City of Ammon Place of Use

Weighted Centroid of Diversions
ESPA Model Cell (75,163)

