	February 2, 2006 - Discussion with Kansas  Mike Thompson  Ann Bleed  Steve Raunghaugh Board members  Etton Hobbot  Etton Hobbot  Kenny Nelson - & Gory Hausloff  Craig Scott  David Pope  Brown Reterran  Mike Delka  Lee Roffs  Gordon Aycock - Scott Guenthme  David Barfield  Scott Ross  Tim Beacheth  Gotnick  G
Bleed-	Ann-background of idea about Bostwick buy-out  for delivery to Kansas
Pope -	Are interested in receiving additional water If they have a full understanding it could proceed.
Pope-	DO+M Cost Shift would not be fair since  KS should have gotten more water anyway.  The issue is the 3 year averaging of costs  between KBID + NBID. Sample work shoet  from USBR-964, 500 shift.
Bleed-	De Harlan C. L. storage, natural flow + if wanter  supply improved during the summer would  that also be available for KS? Supply  There working on it.  Dempart Accounting - Harlan County Reservoir  Evap. Computations. Settlement Stipulation  substitute supply for Superior, than NE  would share in Evap Still for Superior, than NE

	Includes offsetting Superior lands with GW
	Includes offsetting Superior lands with GW would still cause NE to share in evap.?  So, how will we split the evap. Cost?
Pope	(4) Understanding between the states - a hold harmloss type provision - No relief implied under the Compact (Waiver Language)
Pape	6) KS would expect that Storage would continue to be protected + juniors limited. Carriage Loss
Barfield	6 Deliveries to Hardy - not in play if Ks Bostwick takes the water.
Kenny Nolson	- Evapo Comment of How much river loss between Harlan + Guide Rock?
Mike Delka Lee Orton	- Nothing else needs to be discussed at this time
Steve Raum	is only to transfer water between KBID ANDID
Bleed-	Let's lay out a task list
Rolfs- Bleed-	Any need for a rule or computation change? No.

- Forwarded by Justin Lavene/AGO/NEBRLN on 02/01/2006 04:16 PM - David, Ann and others,

Below are details for tomorrow's call between Kansas, Nebraska, and the Bureau to discuss Republican River issues.

It is NOT a toll-free number.

Please pass it on to anyone not on the list that needs to be. Call me with questions.

Thanks.

David Barfield 785-296-3830

Date: Thursday, February 02, 2006

4:00 p.m. Central Std Time

Dial-in Number: 1-712-432-2000 (Iowa)

Participant Access Code: 89423

File Under Bostwick Fan 24, 2006 Feb. 2, 2006

### **SPREADSHEET NOTES:**

Attached are two spreadsheets that split the Harlan County Dam COE's O&M charges between the two Bostwick Districts.

### NOTE:

The Corp of Engineer's O&M charges for Harlan County Dam are split between the two Bostwick Districts based on total annual diversions by each District. The annual diversions as shown are from the Annual Operating Plan (Table 6). These reported diversions include all water available to the Districts, including natural flow and storage from Lovewell and Harlan County dams.

The spreadsheet is used to determine percentage splits between the Districts based on a three year running average, for example – actual diversions for years 2003 through 2005 are the basis for the 26% NE Bostwick and 74% Kansas Bostwick that are used for splitting the 2007 calendar year O&M charges.

On each of the spreadsheets the actual annual diversions for each of the Districts are shown through and including water years 2005.

### SPREADSHEET EXAMPLE 1:

This spreadsheet is based on NE Bostwick being shown as not diverting any water in 2006. This spreadsheet shows all Bostwick Division water being diverted by KS Bostwick. The amount of 46,600 acre feet is based on assumption of 2006 water equal to 2005 plus release of all storage in Harlan County (about 15,700 acre feet). (Note numbers won't exactly add up because of system losses to diversion measuring point.) Estimates for 2007 and 2008 have to be included to determine outyear impacts due to 3 year running average. Estimates for 2007 and 2008 are assumed to equal 2005 diversions for both Districts. This accounting results in NE Bostwick having 9.1% to 8.4% split in years 2008 through 2010. (Note: The accounting for 2006 water has no effect to O&M split for years 2006 and 2007.)

### **SPREADSHEET EXAMPLE 2:**

This spreadsheet is based on NE Bostwick being shown as diverting all water available to NE Bostwick in 2006. The amount of 13,800 acre feet for NE Bostwick is based on assumption of 2006 water equal to 2005 plus release of Harlan County storage available to NE Bostwick (about 10,100 acre feet). The amount of 32,800 acre feet for KS Bostwick is based on assumption of 2006 water equal to 2005 plus release of Harlan County storage available to KS Bostwick (about 5,600 acre feet). (Note - numbers won't exactly add up because of system losses to diversion measuring point.) Estimates for 2007 and 2008 have to be included to determine outyear impacts due to 3 year running average. Estimates for 2007 and 2008 are assumed to equal 2005 diversions for both Districts. This accounting results in NE Bostwick having 21% to 20.8% split in years

2008 through 2010. (Note: The accounting for 2006 water has no effect to O&M split for years 2006 and 2007.)

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Following are actual COE's O&M charges that are split between the Bostwick Districts for years 2003 and 2004; and estimates for years 2005 and 2006:

Actual 2003 = \$151,056

Actual 2004 = \$142,323

Estimated 2005 = \$172,400

Estimated 2006 = \$161,175

For 2007 assume \$5,000 increase = \$166,000

For 2008 assume \$5,000 increase = \$171,000

For 2009 assume \$5,000 increase = \$176,000

For 2010 assume \$5,000 increase = \$181,000

### NE BOSTWICK'S SHARE OF COE'S O&M CHARGES:

	EXAMPLE 1	EXAMPLE 2	DIFFERENCE
2008: (\$171K)	9.1% = \$15,600	21% = \$35,900	\$20,300
2009: (\$176K)	8.4% = \$14,800	20.8% = \$36,600	\$21,800
2010: (\$181K)	8.4% = \$15,200	20.8% = \$37,600 <b>TOTAL</b>	\$22,400 <b>\$64,500</b>

### KS BOSTWICK'S SHARE OF COE'S O&M CHARGES:

	EXAMPLE 1	EXAMPLE 2	DIFFERENCE
2008: (\$171K)	90.9% = \$155,400	79.0% = \$135,100	\$20,300
2009: (\$176K)	91.6% = \$161,200	79.2% = \$139,400	\$21,800
2010: (\$181K)	91.6% = \$165,800	79.2% = \$143,400 <b>TOTAL</b>	\$22,400 <b>\$64,500</b>

NOTE: These are estimated amounts, only intended to provide general understanding of potential impacts to both Districts based on water accounting and division of O&M charges.

# **EXAMPLE 1**

# COST DISTRIBUTION PERCENTAGES

Corps of Engineers HARLAN COUNTY DAM

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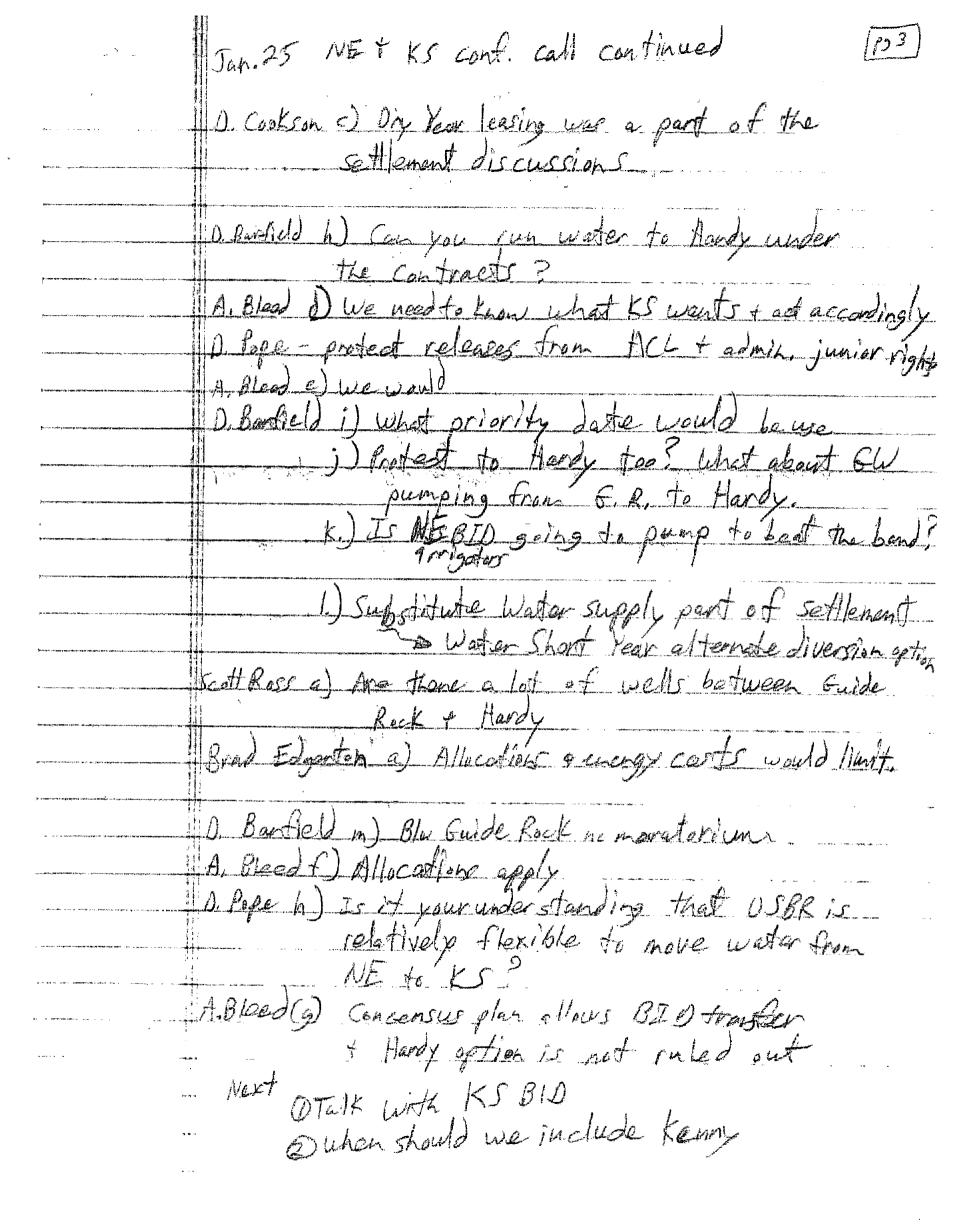
# **EXAMPLE 2**

# COST DISTRIBUTION PERCENTAGES

Corps of Engineers HARLAN COUNTY DAM

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83-964         203 061         139;202         322,981         34.11%         82.276         60.8%           84,092         234,492         142,967         382,381         33.2%         60.8%         60.8%           60,334         224,492         11,845         381,063         44.2%         58.4%         58.4%           60,334         27,334         196,796         114,515         354,197         44.2%         55.6%           67,334         196,796         114,515         354,197         44.2%         55.6%           67,334         196,796         114,515         354,197         44.2%         55.6%           60,277         226,636         122,746         394,003         38.0%         61.0%           64,110         213,433         104,103         344,003         38.0%         61.0%           64,110         213,433         104,103         344,003         38.0%         61.0%           64,110         213,433         104,103         344,003         38.0%         61.0%           64,110         213,432         126,744         220.6%         51.0%           71,277         122,148         143,260         37.4%         51.4%           71,543 <td>1</td> <td>23,052</td> <td>66,436</td> <td>202,587</td> <td>106,212</td> <td>325,639</td> <td>37.8%</td> <td></td> <td>1000</td>	1	23,052	66,436	202,587	106,212	325,639	37.8%		1000
64,092         234,492         142,967         385,381         39,2%         60,8%           60,331         228,387         111,884         391,063         41,6%         56,8%           60,331         228,387         111,884         391,063         44,6%         55,6%           67,334         196,786         114,578         384,808         42,6%         55,6%           67,334         226,674         152,435         394,808         42,6%         57,4%           80,207         226,674         152,435         394,808         42,6%         57,4%           80,909         236,530         122,746         384,86         30,6         62,0%           80,909         236,530         122,746         322,38         36,0         62,0%           80,103         146,740         27,746         384,164         42,6%         55,4%           80,153         148,143         142,46         36,4%         56,3%           80,154         122,142         126,484         20,53         44,6%         55,4%           80,153         148,148         148,48         36,16         56,3%         60,0%           80,163         226,348         146,40         36,0%	12.55	119.930	83.964	203,067	136,202	322,991	37.1%	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Cos
60,331         226,387         111,884         391,063         41,6%         58,4%         58,4%         58,4%         58,4%         58,4%         58,4%         58,4%         58,4%         58,4%         58,4%         58,4%         58,4%         58,4%         55,6%         55,6%         57,4%         55,6%         57,4%         55,6%         57,4%         55,6%         57,4%         55,6%         57,4%         55,6%         57,4%         55,6%         57,4%         55,6%         57,4%         55,6%         57,4%         55,6%         57,4%         55,6%         61,0%		50.889	84,092	234,492	142,967	385,381	39.2%		1986
69,133         1213,556         1127,798         382,649         44.4%         55.6%           67,334         196,798         114,515         354,197         44.4%         55.6%           90,207         226,674         162,495         354,197         44.4%         55.6%           90,207         226,674         172,496         394,396         61.0%         67.0%           80,909         239,539         172,433         104,103         344,003         38.0%         62.0%           64,110         213,433         104,103         344,003         38.0%         62.0%         62.0%           64,110         213,433         104,103         344,003         38.0%         62.0%         62.0%           64,110         213,433         104,103         344,003         38.0%         62.0%         62.0%           71,277         122,142         126,484         272,283         44.6%         57.4%         57.4%           71,277         134,948         118,700         387,161         42.4%         57.4%         57.4%           74,549         226,620         127,670         388,790         41.7%         58.7%         62.0%           80,161         226,944         126,3	ľ	62,666	60,331		111,884 }	391,053	41.6%		1987
67,334         196,796         114,515         354,197         44.4%         55.6%           90,207         226,674         152,495         394,808         42.6%         55.6%           80,207         226,674         152,495         394,808         42.6%         55.4%           80,909         239,530         127,746         392,403         38.0%         62.0%           64,110         213,432         46,794         272,643         39.4%         60.6%           70,323         116,5342         48,260         198,157         42.0%         58.0%           70,324         114,975         48,260         198,157         42.0%         55.4%           70,327         114,975         48,260         377,164         42.6%         55.4%           71,277         122,142         126,484         220,538         41.6%         55.3%           71,277         126,620         127,670         381,7486         41.7%         58.3%           74,549         226,620         127,670         381,7486         41.4%         58.3%           80,163         226,634         163,162         42.6039         41.4%         58.3%           72,50         226,634         163,25 </td <td></td> <td>169,093</td> <td>69.133</td> <td>1</td> <td>127,798</td> <td>382,649</td> <td>44.2%</td> <td>1 10</td> <td>1988</td>		169,093	69.133	1	127,798	382,649	44.2%	1 10	1988
134         90,207         226,674         152,495         394,808         42,6%         57,4%           209         68,414         226,955         117,154         384,164         41.2%         58.8%           305         68,414         235,530         122,746         392,335         39.0%         61.0%           306         64,110         236,534         104,703         344,033         30.0%         62.0%           307         66,110         236,342         104,703         344,03         39.0%         62.0%           307         20,323         114,975         48,260         198,167         42.0%         58.0%           306         77,277         122,142         126,484         220,538         44,6%         57.4%           256         77,342         223,348         118,706         387,610         42.4%         57.6%           257         77,340         127,670         387,610         44.6%         53.2%           367         74,400         387,630         41.4%         58.3%           367         14,400         387,640         41.4%         58.3%           368         77,537         220,082         116,497         42.0%         <		157,399	67,334		114,515	354,197	44.4%		1989
205         68,414         122,955         117,154         384,164         41,2%         55,8%           365         80,909         239,530         122,746         392,395         39,0%         61,0%           370         64,110         213,433         104,103         34,003         38,0%         61,0%           371         64,110         213,433         104,103         324,003         38,0%         60,5%           301         64,110         213,433         104,103         324,003         39,4%         60,5%           301         62,1323         146,1497         44,20         198,157         42,0%         58,0%           306         71,277         122,142         126,784         220,338         44,6%         55,4%           252         71,342         223,348         118,706         387,610         42,4%         57,4%           256         71,342         226,620         127,670         381,796         41,2%         58,2%           304         30,163         230,082         136,093         41,3%         58,2%           31         96,163         240,386         41,3%         58,2%           31         42,00         42,0% <th< td=""><td> </td><td></td><td>90,207</td><td>226</td><td>152,495</td><td>394,808</td><td>42.6%</td><td></td><td>1890</td></th<>			90,207	226	152,495	394,808	42.6%		1890
865         80,909         239,530         122,746         392,395         39,0%         61,0%           570         64,110         213,433         104,103         344,003         38,0%         62,0%           570         64,110         213,433         104,103         344,003         38,0%         60,0%           50         64,110         213,432         148,260         128,157         42.0%         58,0%           182         71,277         122,142         126,484         220,538         44,6%         55,4%           256         71,277         122,142         126,484         126,484         42.0%         57.6%           256         71,277         223,348         126,487         127,164         42.0%         57.6%           256         71,277         223,348         126,420         387,164         42.0%         57.6%           266         74,549         226,320         127,670         386,796         41.7%         58.3%           267         168         230,082         163,153         427,605         41.4%         58.7%           361         361         362,122         41.4%         56.0%         59.0%           361         3	1 1		68 414	11.5	117,154	384 164	41.2%		1991
570         64,110         213,433         104,103         344,003         38 0%         62.0%           301-         301-         20,323         114,975         48,260         198,157         42.0%         58.0%           182         30,542         114,975         48,260         198,157         42.0%         58.0%           182         30,542         114,975         48,260         198,157         42.0%         58.0%           20,56         22,342         118,700         347,464         42.0%         57.8%           216         77,370         223,348         118,700         38.7%         58.3%           507         74,342         226,620         127,670         388,796         41.7%         58.3%           507         74,942         226,620         127,670         388,796         41.3%         58.7%           507         80,163         226,694         163,153         427,805         41.4%         58.0%           508         75,700         248,024         163,153         40.0%         60.0%         58.7%           508         53,191         198,525         116,497         40.0%         60.0%         74.0%           50,80         <		152,865	606'08		122,746	392,395	39.0%		1992
304         20,323         165,342         45,794         272,643         39,4%         50,65%           182         30,542         114,975         48,260         198,157         42.0%         58.0%           396         71,277         122,142         126,484         220,538         44.6%         55.4%           216         71,277         122,142         126,484         220,538         42.4%         57.4%           256         71,342         223,348         118,706         387,610         42.4%         57.6%           266         71,549         226,620         127,670         381,796         40.1%         58.3%           007         75,370         221,881         125,669         163,153         41.4%         58.7%           016         80,163         226,694         163,153         41.4%         58.7%           016         72,700         248,024         116,497         40,0%         60.0%           016         53,181         116,497         319,390         37.8%         62.2%           126,38         111,884         32,492         151,172         26.0%         74.0%           127,780         111,884         32,492         151,172		130,570	64,110	213,	104,103	344,003	38.0%		1993
182         30,542         114,975         48,260         198,157         42.0%         58.0%           396         71,277         122,142         126,484         220,538         44.6%         55.4%           216         80,129         131,942         223,348         118,706         387,610         42.6%         57.6%           256         71,342         223,348         118,706         387,610         42.6%         57.6%           256         71,342         223,348         118,706         387,610         42.4%         57.6%           176         74,549         226,620         127,670         381,796         41.7%         58.7%           007         75,370         221,864         155,960         392,122         41.4%         58.6%           040         80,163         230,082         163,153         420,039         41.4%         58.0%           041         72,700         249,492         116,497         40.05         62.2%           085         53,191         198,526         81,967         40.05         74.0%           127,780         111,884         32,492         151,172         26.0%         74.0%           224         11,186	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		20,323	(65	45,794	272,643	39.4%		1994
396         71,277         122,142         126,484         220,538         44,6%         55.4%           216         80,129         181,948         142,420         317,164         42.6%         57.4%           256         71,942         223,348         118,706         387,610         42.4%         57.6%           256         71,542         226,620         127,670         388,796         41.7%         58.3%           176         74,549         226,620         127,670         388,796         41.7%         58.3%           007         80,163         226,620         135,960         392,122         41.3%         58.7%           016         80,163         230,082         163,153         427,605         41.4%         58.6%           017         95,161         250,694         163,153         427,605         41.4%         58.6%           016         72,634         240,495         116,497         400,576         40.0%         60.0%           399         53,191         158,525         81,967         32,492         41.17         33.4%         66.6%           226         390         31,482         32,492         151,172         20.8%         79.0%			30,542	114	48,260	198,157	42.0%		1995
216         80,129         181,948         142,420         317,164         42.6%         57.4%           262         71,942         223,348         118,706         387,610         42.4%         57.6%           176         74,549         226,620         127,670         381,796         41.7%         58.3%           007         75,370         221,861         12,67,670         392,122         41.3%         58.7%           040         80,163         230,082         135,960         392,122         41.3%         58.7%           040         80,163         250,694         163,153         427,605         41.4%         58.7%           041         95,161         250,694         163,153         427,605         41.4%         58.7%           041         72,634         240,495         116,497         400,576         40.0%         60.0%           059         53,191         198,525         81,967         319,390         37.8%         62.2%           298         27,780         111,884         32,492         151,172         26.0%         74.0%           224         27,780         88,360         32,492         1111,684         20,8%         79,2%			71,277	122	126,484	220,538	44.6%		1996
262         71,942         223,348         118,706         387,610         42.4%         57.6%           176         74,549         226,620         127,670         388,796         41.7%         58.3%           007         75,370         226,620         135,960         392,122         41.3%         58.7%           040         80,163         230,082         135,960         392,122         41.4%         58.6%           911         95,161         250,694         163,153         427,805         41.4%         58.6%           045         72,700         248,024         116,497         40.0%         60.0%           081         72,634         240,495         116,497         40.0%         60.0%           085         53,191         198,525         81,967         37.8%         62.2%           288         27,780         111,884         32,492         74.0%         74.0%           27,780         111,884         32,492         151,172         26.0%         74.0%           27,780         188,350         32,492         74.0%         77.90         77.90           27,7780         188,350         32,492         74.0%         77.90         77.90     <	44 m 244	135 216	12	181 948	142.420	317,164	42.6%	of the second se	1997
74,549         226,620         127,670         388,796         41,7%         58,3%           80,163         226,624         135,960         392,122         41,3%         58,7%           80,163         230,082         135,960         392,122         41,4%         58,7%           95,161         250,694         163,153         427,605         41,4%         58,6%           72,700         240,495         116,497         400,576         40,0%         60,0%           53,191         198,525         81,967         319,390         37,8%         62,2%           53,191         111,884         32,492         151,172         26.0%         74.0%           27,780         111,884         32,492         151,172         26.0%         74.0%           127,780         188,360         32,492         74.0%         77.0%         77.0%           127,780         188,360         32,492         111,1584         32,492         74.0%         77.0%           10 Table 6 of AOP         10 Table 6 of			71,942	223,348	118,706	387,610	42.4%		1998
75,370       221,361       128,492       374,868       41.3%       59.2%         80,163       230,082       135,960       392,122       41.3%       58.7%         95,161       250,694       163,153       427,605       41.4%       58.6%         95,161       250,694       163,153       427,605       41.4%       58.6%         72,700       240,495       116,497       40.0%       60.0%       60.0%         53,191       198,525       81,967       319,390       37.8%       62.2%         27,780       111,884       32,492       151,172       26.0%       74.0%         27,780       111,883,360       32,492       111,11584       20.8%       74.0%         10,77,780       11,11,584       32,492       111,11584       20.8%       74.0%         10,77,780       11,11,584       32,492       111,11584       20.8%       74.0%		162,176		226,620	127,670	388,796	41.7%		1999
80,163       230,082       135,960       392,122       41.3%       58.7%       58.6%         95,161       250,694       163,153       427,805       41.4%       58.6%       58.6%         95,161       250,694       163,153       427,805       41.4%       58.6%       58.6%         72,700       124,95       116,497       400,576       40.0%       60.0%       60.0%         53,191       198,525       81,967       319,390       37.8%       62.2%       74.0%         27,780       111,884       32,492       151,172       26.0%       74.0%       74.0%         11,883,360       111,883,360       132,492       111,11584       121,0%       179,0%       179,0%         127,780       111,883,360       111,11584		153,007	75,370	221,861	128,492	374.868	40.8%		2000
95,161 250,694 163,153 427,605 41.4% 58.6% 58.6% 72,634 240,495 116,497 400,576 40.0% 60.0% 60.0% 72,634 240,495 116,497 400,576 40.0% 60.0% 60.0% 53,191 198,525 81,967 319,390 37.8% 62.2% 77.780 111,884 32,492 151,172 26.0% 74.		162,040		230,082	135,960	392,122			2001
72,700         72,700         410,96         410,96         400,576         400,576         400,576         400,676         60.0%         74.0%         60.0%         74.0%         74.0%         74.0%         74.0%         74.0%         75.2%		176,911	95,161	250,694	163,153	427,605	41.4%		2002
72,634         240,495         116,497         400,576         40.0%         60.0%           53,191         198,525         81,967         319,390         37.8%         62.2%           27,780         111,884         32,492         151,172         26.0%         74.0%           111,883         32,492         111,184         7912%           127,780         111,883,360         111,111,111,111,111,111,111,111,111,11	Part of the second	172.015	72,700	248 024	120,926	420,039	41.0%		2003
53,191       198,525       81,967       319,390       37.8%       62.2%         9       32,492       151,172       26.0%       74.0%         27,780       111,884       32,492       15805       17.0%       74.0%         4       27,780       188,360       32,492       111,584       79.2%         4       17,180       188,360       79.2%       79.2%         10       17,186       111,584       79.2%		160,081	72,634	240,495	116,497	400,576	40.0%		2004
439/288       32,492       151,172       26.0%       74.0%         1312       1312       141,884       32,492       151,172       26.0%       74.0%         1312       <		120,865	53,191	198,525	81,967	319,390	37.8%		2005
1288       27,780       111,884       32,492       151,172       26.0%       74.0%         1312       1312       115,805 <td>( 10 f) ( 10 f) ( 10 f) ( 10 f) ( 10 f)</td> <td>78 439</td> <td>30,913</td> <td>156,738</td> <td>36.713</td> <td>235,177</td> <td>33.4%</td> <td></td> <td>2008</td>	( 10 f) ( 10 f) ( 10 f) ( 10 f) ( 10 f)	78 439	30,913	156,738	36.713	235,177	33.4%		2008
1312 210% 210% 791		39,288		111,884	32,492	151,172	26.0%		2007
3.224 11 27,780 11 88,360 11 32,492 11 11,584 12 20,8% 17 32,492 11 12,584 12 20,8% 17 32,492 11 12,584 12 12 12 12 12 12 12 12 12 12 12 12 12	10.00	24.312	32,800	16	46,600	15,805	21.0%		2008
1224 111,584 20,8% 79,2% 79,2% 10,000 10,000 10,000 10,000 10,000 10,000 10,000 10,000 10,000 10,000 10,000 10		23 224	27.780	88	32.492	111584	20.8%	62	
found in Table 6 of AOP		23,224	27.780	88	32,492	111584	20.8%	1.0	2010
	3) can	be found	in Table 6 of	d(					

D. Bord	eld b) Can't get 30 cfs (Nat. Flaw) down the
	canal very efficiently in June + August
	eld b) Can't get 30 cfs (Nat. flaw) down the canal very efficiently in June + August (out side of storage delivery)
. O. Codron	a) we want to find out how best to deliver the
·· .	a) we want to find out how best to deliver the water most efficiently.
··	A STATE OF THE PARTY OF THE PAR
_ D. Bard	eld c) Not completely sure what we are proposing a) Kepmy would need enough to make a run at delivering enough whater, including adding the staff
	D'Kepmy would need enough to make a run
	at delivering event water, including adding
	And the second s
	e) How would accounting work?
Δ	
A. Blee	I we wanted to get some understanding if
	Due wonted to get some understanding if you are willing to pursue a deal of their we can talk details
	Then we can talk de all
0 0	1) ()
Banti	ld f) increase NE alloc we increasing cu
Andrew State of the Control of the C	g) KSBID is concerned about increased
	Ot M from USBR IF NEBID Joseph take
	(Maybe NE can offer labor in lieu of \$)
	1
D. Pope	e) KSBID new want water
_ O. Cookson	b) If Ks wants water at Hardy us KSBID taking it,
Faces and commences of a commence of	We are open to considering other options with KS
D. f.pe	(4) may be preferable to divert water at Guide Rock
T. In the control of	g) Compact Compliance issue - Ks may have to worm about the water short Year, + they aren't forgetting overall compete compliance
	about the Water Short Year, 4 they aren't forgetting overall compliance



	O Pape 1) Yeah, what about time frame are you looking at?
	A, Bled h) We're working on an answer.
	D. Pape j) we'll check our legal position + also look at what ever win /win situation we can come up with. we'll get busy looking at what our needs are K) we will talk to KSBID + Look at Hand,
	We will talk to KSBID + look at Handy option t then get back to you w/ the U.S. B. R.
	A. Black i) Next week?
termina mang menganan san saha, san kamanan mananan san menganap menghabahan sa say sahi sa mananan s	D. Papa U. Sure-Ont à date w/ Bureau
	John Draper a) Documenting what we are doing at some point.
	Scott Ross b) Do we need to talk to Hal?
	Ann B. j) Later D. Pape m) Later
***************************************	D. Borfield m) No real account issues
Q, Papa	aetion woods to be done.

DLabor Problem

(D Bostvick land 100% dryland?

Net Meld needs definition

(D) Nat. Flow not enough for

Canal ~ 300% historically.

(D) Accounting Changes?

(D) OHM Increase for KSBID

(D) KS water short year compliance

(D) Priority Date + Protestion if

retoused to Handy

(D) USBR contracts all ow pass GR

Diversion Option in Settlement
Diversion Option in Settlement
Obelow Guide Rock Moratorium

(1) Nebraska Must Notlifi Ks
of its Water Short Year

Plans

1.1	
	Jan, 25, 2006 NE+KS Conference Call [P95]
	D, Pape 0) Media Coverage of Rap. River issues- what is proposed by Congressment A.G. 5 from KS+NE meeting?
	J. Lavene a) We one not apprised of what is happaning
	Differ P) Lest's wrap it up since Ann had to leave to speak with the Governor (Heineman)
	· .
	en e

### Republican River Compact Administration

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Center Pivot 17% LEPA 10%

### c) Federal Canals

Computed Beneficial Consumptive Use of diversions by Federal canals will be calculated as shown in Attachment 7. For each Bureau of Reclamation Canal the field deliveries shall be subtracted from the diversion from the river to determine the canal losses. The field delivery shall be multiplied by one minus an average system efficiency for the district to determine the loss of water from the field. Eighty-two percent of the sum of the field loss plus the canal loss shall be considered to be the return flow from the canal diversion. The assumed field efficiencies and the amount of the field and canal loss that reaches the stream may be reviewed by the RRCA and adjusted as appropriate to insure their accuracy.

### d) Non-irrigation Uses

Any non-irrigation uses diverting or pumping more than 50 acre-feet per year will be required to measure diversions. Non-irrigation uses diverting more than 50 Acre-feet per year will be assessed a Computed Beneficial Consumptive Use of 50% of what is pumped or diverted, unless the entity presents evidence to the RRCA demonstrating a different percentage should be used.

### e) Evaporation from Federal Reservoirs

Net Evaporation from Federal Reservoirs will be calculated as follows:

### (1) Harlan County Lake, Evaporation Calculation

### April 1 through October 31:

Evaporation from Harlan County Lake is calculated by the Corps of Engineers on a daily basis from April 1 through October 31. Daily readings are taken from a Class A evaporation pan maintained near the project office. Any precipitation recorded at the project office is added to the pan reading to obtain the actual evaporation amount. The pan value is multiplied by a pan coefficient that varies by month. These values are:

March	.56
April	.52
May	.53
June	.60
July	.68
August	.78
September	.91
October	1.01

The pan coefficients were determined by studies the Corps of Engineers conducted a number of years ago. The result is the evaporation in inches. It is divided by 12 and multiplied by the daily lake surface area in acres to obtain the evaporation in Acre-feet. The lake surface area is determined by the 8:00 a.m. elevation reading applied to the lake's area-capacity data. The area-capacity data is updated periodically through a sediment survey. The last survey was completed in December 2000.

### November 1 through March 31

During the winter season, a monthly total evaporation in inches has been determined. The amount varies with the percent of ice cover. The values used are:

### HARLAN COUNTY LAKE

Estimated Evaporation in Inches Winter Season -- Monthly Total

### PERCENTAGE OF ICE COVER

	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
JAN	0.88	0.87	0.85	0.84	0.83	0.82	0.81	0.80	0.78	0.77	0.76
FEB	0.90	0.88	0.87	0.86	0.85	0.84	0.83	0.82	0.81	0.80	0.79
MAR	1.29	1.28	1.27	1.26	1.25	1.24	1.23	1.22	1.21	1.20	1.19
OCT	4.87		_	NO							
				ICE							
NOV	2.81			NO	-		Ţ				
				ICE			<u> </u>				
DEC	1.31	1.29	1.27	1.25	1.24	1.22	1.20	1.18	1.17	1.16	1.14

The monthly total is divided by the number of days in the month to obtain a daily evaporation value in inches. It is divided by 12 and

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Republican River Compact Administration

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Revised January 2005

multiplied by the daily lake surface area in acres to obtain the evaporation in Acre-feet. The lake surface area is determined by the 8:00 a.m. elevation reading applied to the lake's area-capacity data. The area-capacity data is updated periodically through a sediment survey. The last survey was completed in December 2000.

To obtain the net evaporation, the monthly precipitation on the lake is subtracted from the monthly gross evaporation. The monthly precipitation is calculated by multiplying the sum of the month's daily precipitation in inches by the average of the end of the month lake surface area for the previous month and the end of the month lake surface area for the current month in acres and dividing the result by 12 to obtain the precipitation for the month in acre feet.

The total annual net evaporation (Acre-feet) will be charged to Kansas and Nebraska in proportion to the annual diversions made by the Kansas Bostwick Irrigation District and the Nebraska Bostwick Irrigation District during the time period each year when irrigation releases are being made from Harlan County Lake. In the event Nebraska chooses to substitute supply for the Superior Canal from Nebraska's allocation below Guide Rock in Water-Short Year Administration years, the amount of the substitute supply will be included in the calculation of the split as if it had been diverted to the Superior Canal at Guide Rock.

(2) Evaporation Computations for Bureau of Reclamation Reservoirs The Bureau of Reclamation computes the amount of evaporation loss on a monthly basis at Reclamation reservoirs. The following procedure is utilized in calculating the loss in Acre-feet.

An evaporation pan reading is taken each day at the dam site. This measurement is the amount of water lost from the pan over a 24-hour period in inches. The evaporation pan reading is adjusted for any precipitation recorded during the 24-hour period. Instructions for determining the daily pan evaporation are found in the "National Weather Service Observing Handbook No. 2 – Substation Observations." All dams located in the Kansas River Basin with the exception of Bonny Dam are National Weather Service Cooperative Observers. The daily evaporation pan readings are totaled at the end of each month and converted to a "free water surface" (FWS) evaporation, also referred to as "lake" evaporation. The FWS evaporation by a coefficient of .70 at each of the reservoirs. This

# Excerpts from Settlement Stipulation & Appendices Relating to Water Short Year Administration

Administration is in effect, pursuant to Subsection V.B.1.a., will become final for that year as of June 30.

- 2. Nebraska action in Water-Short Year Administration:
  - a. During Water-Short Year Administration,
    Nebraska will limit its Computed Beneficial
    Consumptive Use above Guide Rock to not more
    than Nebraska's Allocation that is derived from
    sources above Guide Rock, and Nebraska's share
    of any unused portion of Colorado's Allocation
    (no entitlement to Colorado's unused Allocation is
    implied or expressly granted by this provision).
    To accomplish this limitation, Nebraska may use
    one or more of the following measures:
    - i. supplementing water for Nebraska Bostwick Irrigation District by providing alternate supplies from below Guide Rock or from outside the Basin;
    - ii. adjusting well allocations for alluvial Wells above Guide Rock;
    - iii. adjusting multi-year well allocations for non-alluvial Wells above Guide Rock;
    - iv. reducing use of storage by Nebraska
      Bostwick Irrigation District above Guide
      Rock;
    - v. dry year leasing of water rights that divert at or above Guide Rock, or;
    - vi. any other measures that would help
      Nebraska limit Computed Beneficial
      Consumptive Use above Guide Rock to not
      more than that portion of Nebraska's
      allocation that is derived from sources above

Guide Rock and would (1) produce water above Harlan County Lake; (2) produce water below Harlan County Lake and above Guide Rock that can be diverted during the Bostwick irrigation season; or (3) produce water that can be stored and is needed to fill Lovewell Reservoir.

- b. Nebraska may offset any Computed Beneficial Consumptive Use in excess of its Allocation that is derived from sources above Guide Rock with Imported Water Supply Credit. If Nebraska chooses to exercise its option to offset with Imported Water Supply Credit, Nebraska will receive credit only for Imported Water Supply that: (1) produces water above Harlan County Lake; (2) produces water below Harlan County Lake and above Guide Rock that can be diverted during the Bostwick irrigation season; (3) produces water that can be stored and is needed to fill Lovewell Reservoir; or (4) Kansas and Nebraska will explore crediting water that is otherwise useable by Kansas.
- c. During Water-Short Year Administration,
  Nebraska will also limit its Computed Beneficial
  Consumptive Use in the Sub-basins to the sum of
  Nebraska's specific Sub-basin Allocations and
  48.9% of the sum of the Unallocated Supply from
  those same Sub-basins.
- d. In years projected to be subject to Water-Short Year Administration, Nebraska will advise the other States and the United States no later than April 30 of measures Nebraska plans to take for that year and the anticipated water yield from those measures. In each Water-Short Year Administration year, Nebraska will advise the other States and the United States no later than June 30 of the measures it has taken or will take

- for the year and the anticipated water yield from those measures.
- e. For purposes of determining Nebraska's compliance with Subsection V.B.2.:
  - i. Virgin Water Supply, Computed Water Supply, Allocations and Computed Beneficial Consumptive Use will be calculated on a two-year running average, as computed above Guide Rock, with any Water-Short Year Administration year treated as the second year of the two-year running average and using the prior year as the first year; or
  - ii. as an alternative, Nebraska may submit an Alternative Water-Short Year Administration Plan to the RRCA in accordance with the procedures set forth in Appendix M. The RRCA may modify Appendix M in any manner consistent with this Stipulation and the Compact.
- If, in the first year after Water-Short Year f. Administration is no longer in effect, the Compact accounting shows that Nebraska's Computed Beneficial Consumptive Use as calculated above Guide Rock in the previous year exceeded its annual Allocation above Guide Rock, and, for the current year, the expected or actual supply from Harlan County Lake, calculated pursuant to Subsection V.B.1.a., is greater than 119,000 Acrefeet but less than 130,000 Acre-feet, then Nebraska must either make up the entire amount of the previous year's Computed Beneficial Consumptive Use in excess of its Allocation, or the amount of the deficit needed to provide a projected supply in Harlan County Lake of at least 130,000 Acre-feet, whichever is less.

- g. If in any month during the year, the projected or actual irrigation supply from Harlan County Lake is equal to or greater than 119,000 Acre-feet, Nebraska may, at its discretion, cease the administrative action called for in this agreement in Subsection V.B.2.a.; provided, however, that any Alternative Water-Short Year Administration Plan shall be subject to the requirements set forth in Appendix M.
- 3. Colorado action: In those years when Water-Short Year Administration is in effect, Colorado agrees to limit its use of the flexibility identified in Subsection IV.B., to the extent that any portion of Colorado's Allocation from Beaver Creek cannot be used on any other Sub-basin in Colorado.
- 4. Northwest Kansas action: In those years when Water-Short Year Administration is in effect, Kansas agrees to (1) measure compliance in Northwest Kansas on a two-year average, using the current and the previous year, and (2) limit Computed Beneficial Consumptive Use in the Sub-basins to the sum of Kansas' specific Sub-basin Allocations and 51.1% of the sum of the Unallocated Supply from those same Sub-basins and 51.1% of any unused portion of Colorado's Allocation (no entitlement to Colorado's unused Allocation is implied or expressly granted by this provision), or determine compliance in such other manner as agreed to by the RRCA.

### VI. Soil and Water Conservation Measures

- A. For the purposes of Compact accounting the States will calculate the evaporation from Non-Federal Reservoirs located in an area that contributes run-off to the Republican River above Harlan County Lake, in accordance with the methodology set forth in the RRCA Accounting Procedures.
- B. In order to attempt to develop information that may allow the States to assess the impacts of Non-Federal Reservoirs and land

described in Subsections IV.A.2.a.-d. The Computed Beneficial Consumptive Use of surface water from Federal Reservoir and Non-Federal Reservoir evaporation shall be the net reservoir evaporation from the reservoirs, as described in Subsections IV.A.2.e.-f.

For Sub-basins where the gage designated in Section II. is near the confluence with the Main Stem, each State's Sub-basin Computed Beneficial Consumptive Use of surface water shall be the State's Computed Beneficial Consumptive Use of surface water above the Sub-basin gage. For Medicine Creek, Sappa Creek, Beaver Creek and Prairie Dog Creek, where the gage is not near the confluence with the Main Stem, each State's Computed Beneficial Consumptive Use of surface water shall be the sum of the State's Computed Beneficial Consumptive Use of surface water above the gage, and its Computed Beneficial Consumptive Use of surface water between the gage and the confluence with the Main Stem.

# E. Calculation to Determine Compact Compliance Using Five-Year Running Averages

Each year, using the procedures described herein, the RRCA will calculate the Annual Allocations by Designated Drainage Basin and total for each State, the Computed Beneficial Consumptive Use by Designated Drainage Basin and total for each State and the Imported Water Supply Credit that a State may use in that year. These results for the current Compact accounting year as well as the results of the previous four accounting years and the five-year average of these results will be displayed in the format shown in Table 3.

## F. Calculations To Determine Colorado's and Kansas's Compliance with the Subbasin Non-Impairment Requirement

The data needed to determine Colorado's and Kansas's compliance with the Sub-basin non-impairment requirement in Subsection IV.B.2. of the Stipulation are shown in Tables 4.A. and B.

### G. Calculations To Determine Projected Water Supply

### 1. Procedures to Determine Water Short Years

The Bureau of Reclamation will provide each of the States with a monthly or, if requested by any one of the States, a more frequent update of the projected or actual irrigation supply from Harlan County Lake for that irrigation season using the methodology described in the Harlan County Lake Operation Consensus Plan, attached as Appendix K to the Stipulation. The steps for the calculation are as follows:

Step 1. At the beginning of the calculation month (1) the total projected inflow for the calculation month and each succeeding month through the end of May shall be added to the previous end of month Harlan County Lake content and (2) the total projected 1993 level evaporation loss for the calculation month and each succeeding month through the end of May shall then be subtracted. The total projected inflow shall be the 1993 level average monthly inflow or the running average monthly inflow for the previous five years, whichever is less.

Step 2. Determine the maximum irrigation water available by subtracting the sediment pool storage (currently 164,111 Acre-feet) and adding the summer sediment pool evaporation (20,000 Acre-feet) to the result from Step 1.

Step 3. For October through January calculations, take the result from Step 2 and using the Shared Shortage Adjustment Table in Attachment 2 hereto, determine the preliminary irrigation water available for release. The calculation using the end of December content (January calculation month) indicates the minimum amount of irrigation water available for release at the end of May. For February through June calculations, subtract the maximum irrigation water available for the January calculation month from the maximum irrigation water available for the calculation month. If the result is negative, the irrigation water available for release (January calculation month) stays the same. If the result is positive the preliminary irrigation water available for release (January calculation month) is increased by the positive amount.

Step 4. Compare the result from Step 3 to 119,000 Acre-feet. If the result from Step 3 is less than 119,000 Acre-feet Water Short Year Administration is in effect.

Step 5. The final annual Water-Short Year Administration calculation determines the total estimated irrigation supply at the end of June (calculated in July). Use the result from Step 3 for the end of May irrigation release estimate, add the June computed inflow to Harlan County Lake and subtract the June computed gross evaporation loss from Harlan County Lake.

### 2. Procedures to Determine 130,000 Acre Feet Projected Water Supply

To determine the preliminary irrigation supply for the October through June calculation months, follow the procedure described in steps 1 through 4 of the "Procedures to determine Water Short Years" Subsection III. G. 1. The result from step 4 provides the forecasted water supply, which is compared to 130,000 Acrefeet. For the July through September calculation months, use the previous end of calculation month preliminary irrigation supply, add the previous month's Harlan County Lake computed inflow and subtract the previous month's computed gross evaporation loss from Harlan County Lake to determine the current preliminary irrigation supply. The result is compared to 130,000 Acre-feet.

# H. Calculation of Computed Water Supply, Allocations and Computed Beneficial Consumptive Use Above and Below Guide Rock During Water-Short Administration Years.

For Water-Short-Administration Years, in addition to the normal calculations, the Computed Water Supply, Allocations, Computed Beneficial Consumptive Use and Imported Water Supply Credits shall also be calculated above Guide Rock as shown in Table 5C. These calculations shall be done in the same manner as in non-Water-Short Administration years except that water supplies originating below Guide Rock shall not be included in the calculations of water supplies originating above Guide Rock. The calculations of Computed Beneficial Consumptive Uses shall be also done in the same manner as in non-Water-Short Administration years except that Computed Beneficial Consumptive Uses from diversions below Guide Rock shall not be included. The depletions from the water diverted by the Superior and Courtland Canals at the Superior-Courtland Diversion Dam shall be included in the calculations of Computed Beneficial Consumptive Use above Guide Rock. Imported Water Supply Credits above Guide Rock, as described in Sub-section III.I., may be used as offsets against the Computed Beneficial Consumptive Use above Guide Rock by the State providing the Imported Water Supply Credits.

The Computed Water Supply of the Main Stem reach between Guide Rock and the Hardy gage shall be determined by taking the difference in stream flow at Hardy and Guide Rock, adding Computed Beneficial Consumptive Uses in the reach (this does not include the Computed Beneficial Consumptive Use from the Superior and Courtland Canal diversions), and subtracting return flows from the Superior and Courtland Canals in the reach. The Computed Water Supply above Guide Rock shall be determined by subtracting the Computed Water Supply of the Main Stem reach between Guide Rock and the Hardy gage from the total Computed Water Supply. Nebraska's Allocation above Guide Rock shall be determined by subtracting 48.9% of the Computed Water Supply of the Main Stem reach between Guide Rock and the Hardy gage from Nebraska's total Allocation. Nebraska's Computed Beneficial Consumptive Uses above Guide Rock shall be determined by subtracting Nebraska's Computed Beneficial Consumptive Uses below Guide Rock from Nebraska's total Computed Beneficial Consumptive Uses.

## I. Calculation of Imported Water Supply Credits During Water-Short Year Administration Years.

Imported Water Supply Credit during Water-Short Year Administration years shall be calculated consistent with Subsection V.B.2.b. of the Stipulation,

The following methodology shall be used to determine the extent to which Imported Water Supply Credit, as calculated by the RRCA Groundwater Model, can be credited to the State importing the water during Water-Short Year Administration years.

### 1. Monthly Imported Water Supply Credits

The RRCA Groundwater Model will be used to determine monthly Imported Water Supply Credits by State in each Sub-basin and for the Main Stem. The values for each Sub-basin will include all depletions and accretions upstream of the confluence with the Main Stem. The values for the Main Stem will include all depletions and accretions in stream reaches not otherwise accounted for in a Sub-basin. The values for the Main Stem will be computed separately for the reach 1) above Harlan County Dam, 2) between Harlan County Dam and Guide Rock, and 3) between Guide Rock and the Hardy gage. The Imported Water Supply Credit shall be the difference in stream flow for two runs of the model: a) the "base" run and b) the "no State import" run.

During Water-Short Year Administration years, Nebraska's credits in the Subbasins shall be determined as described in Section III. A. 3.

### 2. Imported Water Supply Credits Above Harlan County Dam

Nebraska's Imported Water Supply Credits above Harlan County Dam shall be the sum of all the credits in the Sub-basins and the Main Stem above Harlan County Dam.

# 3. Imported Water Supply Credits Between Harlan County Dam and Guide Rock During the Irrigation Season

- a. During Water-Short Year Administration years, monthly credits in the reach between Harlan County Dam and Guide Rock shall be determined as the differences in the stream flows between the two runs at Guide Rock.
- b. The irrigation season shall be defined as starting on the first day of release of water from Harlan County Lake for irrigation use and ending on the last day of release of water from Harlan County Lake for irrigation use.
- c. Credit as an offset for a State's Computed Beneficial Consumptive Use above Guide Rock will be given to all the Imported Water Supply accruing in the reach between Harlan County Dam and Guide Rock during the irrigation season. If the period of the irrigation season does not coincide with the period of modeled flows, the amount of the Imported Water Supply credited during the irrigation season for that month shall be the total monthly modeled Imported Water Supply Credit times the number of days

in the month occurring during the irrigation season divided by the total number of days in the month.

# 4. Imported Water Supply Credits Between Harlan County Dam and Guide Rock During the Non-Irrigation Season

a. Imported Water Supply Credit shall be given between Harlan County Dam and Guide Rock during the period that flows are diverted to fill Lovewell Reservoir to the extent that imported water was needed to meet Lovewell Reservoir target elevations.

b. Fall and spring fill periods shall be established during which credit shall be given for the Imported Water Supply Credit accruing in the reach. The fall period shall extend from the end of the irrigation season to December 1. The spring period shall extend from March 1 to May 31. The Lovewell target elevations for these fill periods are the projected end of November reservoir level and the projected end of May reservoir level for most probable inflow conditions as indicated in Table 4 in the current Annual Operating Plan prepared by the Bureau of Reclamation.

- c. The amount of water needed to fill Lovewell Reservoir for each period shall be calculated as the storage content of the reservoir at its target elevation at the end of the fill period minus the reservoir content at the start of the fill period plus the amount of net evaporation during this period minus White Rock Creek inflows for the same period.
- d. If the fill period as defined above does not coincide with the period of modeled flows, the amount of the Imported Water Supply Credit during the fill period for that month shall be the total monthly modeled Imported Water Supply Credit times the number of days in the month occurring during the fill season divided by the total number of days in the month.
- e. The amount of non-imported water available to fill Lovewell Reservoir to the target elevation shall be the amount of water available at Guide Rock during the fill period minus the amount of the Imported Water Supply Credit accruing in the reach during the same period.
- f. The amount of the Imported Water Supply Credit that shall be credited against a State's Consumptive Use shall be the amount of water imported by that State that is available in the reach during the fill period or the amount of water needed to reach Lovewell Reservoir target elevations minus the amount of non-imported water available during the fill period, whichever is less.

### 5. Other Credits

Kansas and Nebraska will explore crediting Imported Water Supply that is otherwise useable by Kansas.

### J. Calculations of Compact Compliance in Water-Short Year Administration Years

During Water-Short Year Administration, using the procedures described in Subsections III.A-D, the RRCA will calculate the Annual Allocations for each State, the Computed Beneficial Consumptive Use by each State, and Imported Water Supply Credit that a State may use to offset Computed Beneficial Consumptive Use in that year. The resulting annual and average values will be calculated as displayed in Tables 5 A-C and E.

If Nebraska is implementing an Alternative Water-Short-Year Administration Plan, data to determine Compact compliance will be shown in Table 5D. Nebraska's compliance with the Compact will be determined in the same manner as Nebraska's Above Guide Rock compliance except that compliance will be based on a three-year running average of the current year and previous two year calculations. In addition, Table 5 D. will display the sum of the previous two-year difference in Allocations above Guide Rock and Computed Beneficial Consumptive Uses above Guide Rock minus any Imported Water Credits and compare the result with the Alternative Water-Short-Year Administration Plan's expected decrease in Computed Beneficial Consumptive Use above Guide Rock. Nebraska will be within compliance with the Compact as long as the three-year running average difference in Column 8 is positive and the sum of the previous year and current year deficits above Guide Rock are not greater than the expected decrease in Computed Beneficial Consumptive Use under the plan.

### IV. Specific Formulas

### A. Computed Beneficial Consumptive Use

- 1. Computed Beneficial Consumptive Use of Groundwater: the Computed Beneficial Consumptive Use caused by groundwater diversion shall be determined by the RRCA Groundwater Model as described in Subsection III.D.1.
- 2. Computed Beneficial Consumptive Use of Surface Water: the Computed Beneficial Consumptive Use of surface water shall be calculated as follows:
  - a. Computed Beneficial Consumptive Use from diversions by non-federal canals shall be 60 percent of the diversion; the return flow shall be 40 percent of the diversion
  - b. Computed Beneficial Consumptive Use from small individual surface water pumps shall be 75 percent of the diversion; return flows will be 25 percent of the diversion unless a state provides data on the amount of different system

Table 5C Nebraska Compliance During Water-Short Year Administration

Nebraska	 l							
Year	Allocation			Compute Use (CB		Consumptive	Credits from Imported Water	Difference Between Allocation and Consumptive Use Minus Imported Water Supply Above Guide Rock
Column	Col 1 State Wide Allocation	Col 2 Allocation below Guide Rock	Col 3 State Wide Allocation above Guide Rock	Col 4 State Wide CBCU	Col 5 CBCU below Guide Rock	Col 6 State Wide CBCU above Guide Rock	Col 7 Credits above Guide Rock	Col 8 Col 3 – (Col 6 – Col 7)
Previous Year						TOOK		
Current Year								
Average								

Table 5D: Nebraska Compliance Under a Alternative Water-Short Year Administration Plan

Year	Allocation			Compute Use (CB		Consumptive	Credits from Imported Water	Difference Between Allocation and Consumptive Use Minus Imported Water Supply Above Guide Rock
Column	Col 1	Col 2	Col 3	Col 4	Col 5	Col 6	Col 7	Col 8
	State Wide Allocation	Allocation below Guide Rock	State Wide Allocation above Guide Rock	State Wide CBCU	CBCU below Guide Rock	State Wide CBCU above Guide Rock	Credits above Guide Rock	Col 3 – (Col 6 - Col 7)
Year = -2								
Year = -1		, U*	:					
Current								
Year				-				
Three- Year Average				, , , , d				
	ious Two-yea	r Difference		<u></u>	1			
		CU Under Plan						

# Appendix M Alternative Water-Short Year Administration

- 1. When the projected water supply pursuant to the methodology described in Subsection V.A.2.in the Stipulation is less than 130,000 Acre-feet, in lieu of the requirements of Subsection V.B.2.e.i.of the Stipulation, Nebraska may elect to implement a Plan for Reduction of Computed Beneficial Consumptive Uses (Plan) approved pursuant to paragraph 3.
- 2. Each Plan shall indicate the actions which Nebraska would undertake to reduce its Computed Beneficial Consumptive Uses from the base condition and the amount of reduction expected from those actions. A Plan's designed reductions in Computed Beneficial Consumptive Uses shall be evaluated by the RRCA using methods consistent with the RRCA Accounting Procedures and the RRCA Groundwater Model.
- 3. Nebraska may submit one or more Plans to the RRCA and the RRCA shall take action regarding such Plan(s) pursuant to the schedule below. Nebraska must submit new plans or modifications to existing Plans to the RRCA prior to August 1 for the RRCA's consideration. The RRCA must take action on new Plans or modifications to existing plans prior to Nov. 1 of that same year. Once approved, a Plan shall expire three years from the January 1 following the Plans approval. After a Plan expires, Nebraska may submit the same Plan to the RRCA according to the above schedule. The RRCA may approve multiple Plans.
- 4. If Nebraska elects to implement a Plan, Nebraska will provide notice to the RRCA by April 1of its intention to implement a Plan for that year. If an approved Plan is implemented, Nebraska's Computed Beneficial Consumptive Use of its Allocation above Guide Rock in Water-Short Year Administration shall be calculated on a three year running average of the current year plus the previous two years. Notwithstanding compliance under a three year running average, the two year sum of Nebraska's current and previous year's Computed Beneficial Consumptive Use in excess of its Allocation above Guide Rock, pursuant to Subsection V.B.2., of the Stipulation shall not exceed the amount of Computed Beneficial Consumptive Use that the Plan was designed to reduce above Guide Rock.
- 5. For any year in which Nebraska implements an approved Plan, such Plan shall be in effect for the remainder of the year unless the projected supply rises above 130,000 Acre-feet. At such time, Nebraska may revoke the Plan by

notifying the RRCA. If Nebraska revokes a Plan, the provisions of Subsection V.B.2.e.i., if applicable, shall be in effect. If Nebraska revokes a Plan during the year, it may not resume the Plan in that year.

6. Nebraska may not elect this Alternative Water-Short Year Administration in any year if in the previous year, Water-Short Year Administration was in effect pursuant to Subsection V.B.1.b. and Nebraska failed to elect the Alternative Water-Short Year Administration in that year.

# from Well Moratorium Section

- i. Wells to which a right or permit is transferred in accordance with state law, provided however, that the new Well:
  - (i) consumes no more water than the Historic Consumptive Use of water under the right or permit that is being transferred; and
  - (ii) is not a transfer of a right or permit that would cause an increased stream depletion upstream of Trenton Dam.

Nebraska will calculate Historic Consumptive Use in the manner proposed in Appendix F. Nebraska shall not change its proposed method of calculating Historic Consumptive Use before providing notice to the RRCA;

- j. Wells for expansion of municipal and industrial uses. Any new Wells for these purposes shall be counted against the State's Allocation and, to the extent a State is consuming its full Allocation, other uses shall be reduced to stay within the State's Allocation; and
- k. Wells acquired or constructed by a State for the sole purpose of offsetting stream depletions in order to comply with its Compact Allocations. Provided that, such Wells shall not cause any new net depletion to stream flow either annually or long-term. The determination of net depletions from these Wells will be computed by the RRCA Groundwater Model and included in the State's Computed Beneficial Consumptive Use. Augmentation plans and related accounting procedures submitted under this Subsection III.B.1.k. shall be approved by the RRCA prior to implementation.



# RECLAMATION Managing Water in the West

Fax Cover

U.S. Department of the Interior Bureau of Reclamation Nebraska - Kansas Area Office

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Date: 1-24-66	RECEIVED
Pages including this cover:	JAN 2 4 2006
	DEPARTMENT OF NATURAL RESOURCES
To: Ann Bleed	From: Stede Konshaugen
NE DNR	
To: Dave Barfield	Code: NKAO
Div. of Water Resources	E-mail:
Pave: 785-296-1176	Phone: 308-389-5304
Ann 402-471-2900	
Message:	
Ann Dave:	
Enclosed are draft	f spreadsheets & explanation
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### SPREADSHEET NOTES:

Attached are two spreadsheets that split the Harlan County Dam COE's O&M charges between the two Bostwick Districts.

### NOTE:

The Corp of Engineer's O&M charges for Harlan County Dam are split between the two Bostwick Districts based on total annual diversions by each District. The annual diversions as shown are from the Annual Operating Plan (Table 6). These reported diversions include all water available to the Districts, including natural flow and storage from Lovewell and Harlan County dams.

The spreadsheet is used to determine percentage splits between the Districts based on a three year running average, for example – actual diversions for years 2003 through 2005 are the basis for the 26% NE Bostwick and 74% Kansas Bostwick that are used for splitting the 2007 calendar year O&M charges.

On each of the spreadsheets the actual annual diversions for each of the Districts are shown through and including water years 2005.

### SPREADSHEET EXAMPLE 1:

This spreadsheet is based on NE Bostwick being shown as not diverting any water in 2006. This spreadsheet shows all Bostwick Division water being diverted by KS Bostwick. The amount of 46,600 acre feet is based on assumption of 2006 water equal to 2005 plus release of all storage in Harlan County (about 15,700 acre feet). (Note—numbers won't exactly add up because of system losses to diversion measuring point.) Estimates for 2007 and 2008 have to be included to determine outyear impacts due to 3 year running average. Estimates for 2007 and 2008 are assumed to equal 2005 diversions for both Districts. This accounting results in NE Bostwick having 9.1% to 8.4% split in years 2008 through 2010 (Note: The accounting for 2006 water has no effect to O&M split for years 2006 and 2007.)

### SPREADSHEET EXAMPLE 2:

This spreadsheet is based on NE Bostwick being shown as diverting all water available to NE Bostwick in 2006. The amount of 13,800 acre feet for NE Bostwick is based on assumption of 2006 water equal to 2005 plus release of Harlan County storage available to NE Bostwick (about 10,100 acre feet). The amount of 32,800 acre feet for KS Bostwick is based on assumption of 2006 water equal to 2005 plus release of Harlan County storage available to KS Bostwick (about 5,600 acre feet). (Note – numbers won't exactly add up because of system losses to diversion measuring point.) Estimates for 2007 and 2008 have to be included to determine outyear impacts due to 3 year running average. Estimates for 2007 and 2008 are assumed to equal 2005 diversions for both Districts. This accounting results in NE Bostwick having 21% to 20.8% split in years

2008 through 2010. (Note: The accounting for 2006 water has no effect to O&M split for years 2006 and 2007.)

2

Following are actual COE's O&M charges that are split between the Bostwick Districts for years 2003 and 2004; and estimates for years 2005 and 2006:

Actual 2003 = \$151,056

Actual 2004 = \$142,323

Estimated 2005 = \$172,400

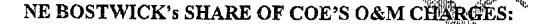
Estimated 2006 = \$161,175

For 2007 assume \$5,000 increase = \$166,000

For 2008 assume \$5,000 increase = \$171,000

For 2009 assume \$5,000 increase = \$176,000

For 2010 assume \$5,000 increase = \$181,000



	EXAMPLE 1	EXAMPLE 2	DIFFERENCE
2008: (\$171K)	9.1% = \$15,600	21% - \$35,900	\$20,300
2009: (\$176K)	8,4% 814,800	20.8% = \$36,600	\$21,800
2010: (\$181K)	84% = \$15,200	20 <b>8%</b> = \$37,600	\$22,400
,		TOTAL	\$64,500

### KS BOSTWICK SHARE OF COE'S O&M CHARGES:

	EXAMPLE 1	EXAMPLE 2	DIFFERENCE
2008: (\$171K)	90.9% = \$155,400	79.0% = \$135,100	\$20,300
2009: (\$176K)	916% = \$161,200	79.2% = \$139,400	\$21,800
2010: (\$181K)	91.6% = \$165,800	79.2% = \$143,400 <b>TOTAL</b>	\$22,400 <b>\$64.500</b>

**NOTE:** These are estimated amounts, only intended to provide general understanding of potential impacts to both Districts based on water accounting and division of O&M charges.

# COST DISTRIBUTION PERCENTAGES

Corps of Engineers
HARLAN COUNTY DAM

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			11. 11. 11. 11. 11. 11. 11. 11. 11. 11.				11	
Anonal :	DO LA COMPANY		3-Year			Percentage	Distribution	
		Annal	Total	ETILIAN THE			11 6 6	
210 SING SING	TELEVICIES IOUS		Diversions	Diersions	Diversions	Nébraska	Kansas	
46,/13	-	50,701	;	99,414		1		Part Services
696,56		50,635	1	104,204		1		1
26,204	158,486	80,126	18 ( 462	136,330	339.948		% F.E.Y	10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
52,810	162,583	79,574	210,335	132,384	372.918		70 V 95	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
66,885	175,899	110,406	270,106	177,291	446 005	%P 0E	60.479	
40,226	159,921	59,353	249 333		P56-0UV	2 2 2 3 4 5 5 5 6 5 6 5 6 6 6 6 6 6 6 6 6 6 6 6	0/0/0/0 0/0/0 0/0/0 0/0/0 0/0/0 0/0/0 0/0/0	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
20,356	157,467	71.009			107,00F		00 60 00 00 00 00 00 00 00 00 00 00 00 0	
33,418	124,000	56.927	187 289	505'1.E.	341 280	0/ C.CC	o.c.00	•
25,360	139,134	83,490	<b>-</b> 10	138.850	607/116	29.0.60	00,2%	1 170
27,916	116,694	52.661	193 078	80.577	647 QAS	707.76	0,0000	
39,776	123,052	66.436	202 587	108 242	211,500	27.7.70	02.3%	1
52,238	119,930	83.964	190:02	100,212	600'076	37.8%	%779	1984
58,875	150.889	84 092	234 492	142 067	100, 200		0/6/20 http://doi.org/10/10/10/10/10/10/10/10/10/10/10/10/10/	C961
51.553	162 666	50 224	706,000	144,907	100,000	39.2%	£0.8%	1986
	102,000	155,00	786,387	111	391,053	41.6%	58.4%	1987
17 4 04 TA	103,033	100 Part 100	13,556	127,798	382,649	44.2%	25.8%	1988
		67,334	196,798	114,515	354,197	% <b>7 7 7 7 8</b>	55.6%	1989
62,288	168,134	90,207	226,674	152,495	394,808	42.6%	57.4%	1990
48,740	158,209	68,414	225,955	<b>#91/2</b>   124	384 164	10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	58.8%	166)
41,837	152,865	606'08	239,530	122,746	392 395	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	61.0%	
39,993	130,570	64,110	213,433	104,103	344.003	38.0%	62.0%	1993
11111125474	108/201	20,323	165 342	45.794	272.643		%9.09	Pobkers
17,718	83,182	30,542	114 975	48,260	198.157	1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	58.0%	1905
55,207	966,396	71,277	122.142	126.484	220 538	44 6 <sup>0</sup> / <sub>4</sub>	45.25	1006
62,291	135,216	80,129	181.948	142,420	1912/2/2019	10.01.11.11.11.11.11.11.11.11.11.11.11.1	70 K.25	7007
46,764	164,262	71,942	223.348	118 706	387.610	4 4 2	57 Ro/	1001
53,121	162,176	74,549	226.620	127 670	388 796	41 7%	%5. 13 %6. 82	1000
53,122	153,007		221.861	128 492	111111111111111111111111111111111111111		120.50	0006
55,797	162,040	80,163	230.082	135.960	392 122	ill in in in in in	70 Z Z	2001
67,992	176,911	95,161	250.694	163 153	427 605	41	58 60%	2002
48,226	172.015	72.700	248 024	1900/10/19	OEU.UCK	27-11-12-12-13-1	50.0%	2007
43,863	160.081	72 634	240 495	118 497		** ** ** ** ** ** ** ** ** ** ** ** **	700 00	7000
28 776	120 865	53 101		101011	100,000	0/0.01	00.079	2004
0000	200,000	101.00 101.00	150,027	108,10	086,816		%Z.29	2005
	EC# 07	ا در	155,738	30/13	235,177		9.99	2006
4,/12	39,288	21,780	111,884	32,492	151,172		74.0%	2007
	10 512	46,600	105,293	46,600	115.805	% V.6	%6.06	2008
4.712	9,424		102 160	32,492	11,584		1%916	5000
12127 Table 1	9,424	27.780	102.160	32-492	141.584	%F8	04 F9%	2010
in columns (1) and (3)	can be found	in Table 6 of AOP		4		1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	

**EXAMPLE 2** Corps of Engineers HARLAN COUNTY DAM

Draft

Columbia   Columbia	104,204 104,204 104,204 104,204 132,384 127,291 121,365 90,345 90,345 106,212 142,967 111,884 111,884 111,515 152,495	339,948 372,918 446,005 398,235 311,289 311,289 311,289 309,772 309,772 322,991 385,381 385,381 385,649 354,197	Percentage	DISTUTION 1000	
1972   48,713   50,701   1972   48,713   50,635   1973   1974   1975   53,569   50,635   1974   1975   52,810   162,583   79,74   1975   52,810   162,583   79,574   1975   52,810   162,583   79,574   1976   56,827   175,899   110,406   1976   56,326   157,467   71,009   1978   33,418   157,467   71,009   1978   33,418   124,000   56,327   1981   27,946   116,694   66,436   1981   27,946   116,694   66,436   1982   39,776   123,052   66,436   1982   39,776   123,052   66,434   1984   58,875   119,930   67,334   1985   52,238   162,666   60,331   1986   62,288   168,134   90,207   1990   41,837   152,865   80,909   17,718   83,182   30,542   1990   41,837   152,865   80,909   17,718   83,182   30,542   1990   41,837   152,865   80,909   17,718   1990   44,764   164,262   71,942   1990   44,764   164,262   74,942   1990   44,764   164,262   74,549   1990   53,122   162,040   80,163   100,000   67,907   176,041   95,122   1990   1990   53,122   162,040   80,163   100,163	99,414 99,414 104,204 132,384 177,291 121,365 90,345 90,345 106,212 142,967 111,884 114,515 152,495	339,948 372,918 372,918 446,005 398,235 311,289 311,289 309,772 309,772 309,772 385,639 385,639 385,649 385,649		DISTRIBUTION  50.4% 60.9% 60.2% 60.2% 62.3% 62.2% 62.2% 62.2% 62.2% 62.2% 62.2% 62.2% 62.2%	1984 1986 1987
1972         Diversions         Diversions         Diversions           1972         48,713          50,701           1973         53,569          50,635           1974         52,810         162,583         79,774           1975         52,810         175,899         110,406           1976         66,885         175,899         110,406           1978         50,356         157,467         71,009           1978         33,418         124,000         56,927           1978         33,418         124,000         56,927           1979         33,418         124,000         56,927           1971         35,756         175,899         110,406           1972         35,736         175,899         17,009           1981         27,916         123,052         66,336           1982         52,238         119,930         67,334           1984         52,238         150,889         84,092           1985         55,238         150,889         84,092           1986         47,181         157,399         67,334           1986         46,740         152,865         80,099 <td>99,414 104,204 104,204 132,384 177,291 121,365 90,345 106,577 106,212 142,967 111,884 114,515 152,495</td> <td>339,948 372,918 372,918 446,005 398,235 311,289 311,289 325,639 325,639 385,381 385,381 385,381 385,381</td> <td></td> <td>60.9% 60.3% 60.3% 62.3% 62.2% 62.2% 62.2% 62.2% 62.2% 62.2% 62.3% 62.2% 62.2% 62.8%</td> <td>198(</td>	99,414 104,204 104,204 132,384 177,291 121,365 90,345 106,577 106,212 142,967 111,884 114,515 152,495	339,948 372,918 372,918 446,005 398,235 311,289 311,289 325,639 325,639 385,381 385,381 385,381 385,381		60.9% 60.3% 60.3% 62.3% 62.2% 62.2% 62.2% 62.2% 62.2% 62.2% 62.3% 62.2% 62.2% 62.8%	198(
1972         48,713	104,204 99,414 104,204 132,384 177,291 177,291 121,365 90,345 90,345 106,212 142,967 111,884 111,884 111,884 111,884 111,1545	339,948 372,918 446,005 446,005 398,235 311,289 311,289 311,289 325,639 325,639 385,381 385,381 381,053		60.2% 60.2% 60.2% 60.2% 60.2% 60.2% 62.3% 62.3% 62.3% 62.3% 62.3% 62.3% 62.3% 62.3% 62.3%	198/
1972   49,713   50,701     1973   53,569   50,635     1974   52,204   158,486   10,406     1976   66,885   175,899   110,406     1976   66,885   175,899   110,406     1978   50,356   157,467   71,009     1978   33,418   124,000   56,927     1981   27,916   116,694   52,661     1982   39,776   123,052   66,436     1984   58,875   150,889   84,092     1985   51,553   162,666   60,331     1985   51,553   162,666   60,331     1986   56,288   168,134   90,207     1987   47,181   157,399   67,334     1988   62,288   168,134   90,207     1990   41,837   152,865   80,909     1991   39,993   130,570   64,110     1992   17,718   83,182   30,422     1993   17,718   83,182   30,422     1994   46,764   164,262   71,942     1999   46,764   164,262   71,942     1999   55,797   162,007     1999   55,797   162,007     1999   66,764   164,262   74,549     1999   55,797   162,007     1999   67,997   162,007     1999   67,997   162,007     1999   67,997   162,007     1999   67,997   162,007     1999   67,997   162,007     1999   67,997   162,007     1999   67,997   162,007     1999   67,997   162,007     1999   67,997   166,041     1999   67,997   166,041     1999   67,997   166,041     1999   67,997   166,041     1999   67,997   166,041     1999   67,997   166,041     1999   67,997   166,041     1999   67,997   166,041     1999   67,997   166,041     1990   67,997   166,041     1990   67,997   166,041     1990   67,997   166,041     1990   67,997   166,041     1990   67,997   166,041     1990   67,997   166,041     1990   106,041     19	99,414 104,204 132,384 177,291 127,365 90,345 106,212 111,884 111,884 111,884 111,884 111,884 111,884 111,884 111,884	339,948 372,918 446,005 398,235 311,289 311,289 325,639 325,639 385,381 385,381 385,381		  56.4% 60.6% 60.5% 60.2% 62.3% 62.3% 62.3% 62.3% 62.3% 62.3% 62.3% 62.3%	198(
1973         33,309          50,635           1974         56,204         158,488         79,574           1975         52,810         162,583         79,574           1976         66,885         175,899         110,406           1978         50,356         157,467         71,009           1978         33,418         124,000         56,927           1981         27,946         16,684         52,661           1982         39,776         123,052         66,436           1983         52,238         111,993         84,092           1984         52,238         111,993         67,334           1985         51,553         162,666         66,436           1985         47,181         162,666         66,436           1986         51,553         162,666         66,414           1987         47,181         162,666         68,414           1988         62,286         168,436         66,414           1989         41,837         162,266         68,414           1991         39,937         130,422         10,43           1992         17,718         162,266         68,414 <td>104,204 132,384 177,291 177,291 121,365 90,345 90,345 106,212 106,212 142,967 111,884 111,884 111,585 111,884 111,585 111,585 111,586</td> <td>339,948 372,918 446,005 398,235 311,289 311,289 309,772 325,639 385,381 385,381 385,381 385,649</td> <td>                                     </td> <td>56.4% 56.4% 60.6% 60.5% 60.2% 62.3% 62.3% 62.3% 62.3% 62.3% 62.3% 63.4%</td> <td>                                     </td>	104,204 132,384 177,291 177,291 121,365 90,345 90,345 106,212 106,212 142,967 111,884 111,884 111,585 111,884 111,585 111,585 111,586	339,948 372,918 446,005 398,235 311,289 311,289 309,772 325,639 385,381 385,381 385,381 385,649		56.4% 56.4% 60.6% 60.5% 60.2% 62.3% 62.3% 62.3% 62.3% 62.3% 62.3% 63.4%	
1974         56,204         158,486         1974           1975         52,810         162,583         79,574           1976         66,885         175,899         110,406           1978         50,356         157,467         71,009           1978         50,356         157,467         71,009           1978         50,356         157,467         71,009           1981         27,916         116,694         52,661           1982         39,776         123,052         66,334           1984         39,776         150,899         84,092           1985         51,553         162,666         60,331           1986         51,553         162,666         60,334           1986         47,181         157,399         67,334           1986         62,286         168,134         60,207           1987         47,181         152,865         80,909           1990         41,837         152,865         80,909           1991         39,993         130,570         64,110           1992         17,718         83,182         30,542           1994         55,207         96,396         71,542     <	132,384 177,291 177,291 127,365 90,345 90,345 106,212 142,967 111,884 111,884 111,884 111,884 111,884 111,864 111,515	339,948 372,918 446,005 398,235 311,289 311,289 309,772 325,639 385,381 385,381 385,361 385,361		56.4% 60.6% 60.9% 60.2% 62.3% 62.2% 62.2% 62.2% 58.4%	1   1   1   1   1   1   1   1   1   1
1975         52,810         162,583         79,574           1976         66,885         175,899         110,406           1977         40,226         157,467         71,009           1978         50,356         157,467         71,009           1978         33,418         124,000         56,927           1981         27,916         116,694         52,661           1981         27,916         116,894         52,661           1984         51,553         115,899         84,092           1984         51,553         162,666         60,331           1985         51,553         162,666         60,334           1986         47,181         157,399         67,334           1987         47,181         157,399         67,334           1988         62,286         168,134         90,207           1980         41,837         152,865         80,909           1991         39,993         130,570         64,110           1993         17,718         83,182         30,542           1994         55,207         98,396         71,277           1996         46,764         162,067         74,543	132,384 177,291 127,291 127,365 90,345 80,577 106,212 142,967 111,884 111,884 111,884 111,615	372,918 446,005 398,235 311,289 311,289 309,772 325,639 385,381 385,381 381,053 354,197	31   MaioN   MaioN   MaioN   Miles	56.4% 60.6% 60.5% 60.2% 62.3% 62.3% 62.2% 62.2% 62.8% 63.4%	
1976         66,885         175,899         110,406           1973         40,226         157,467         71,009           1979         33,418         124,000         56,927           1979         33,418         124,000         56,927           1981         27,916         116,894         52,661           1982         39,776         123,052         66,436           1983         47,81         150,889         84,092           1984         52,238         162,666         60,334           1985         47,181         150,889         84,092           1986         47,181         157,399         67,334           1988         47,181         157,399         67,334           1989         48,740         152,865         80,909           1990         41,837         152,865         80,909           1991         41,837         152,865         80,909           1993         17,718         83,182         30,542           1994         55,207         98,396         71,277           1996         46,764         162,166         71,942           1997         53,121         162,176         71,942	177,291 121,365 90,345 90,345 10,577 106,212 142,967 111,884 111,884 111,884 111,884 111,515	1   1   1   1   1   1   1   1   1   1		60.6% 60.5% 60.2% 62.3% 62.3% 62.3% 62.3% 62.3% 62.3%	1
1974         40,226         155,261         71,009           1978         33,418         124,000         56,927           1979         33,418         124,000         56,927           1981         27,916         116,694         52,661           1982         39,776         123,052         66,436           1983         55,238         115,893         84,092           1985         51,553         162,666         60,334           1986         51,553         162,666         60,334           1987         47,181         157,399         67,334           1988         62,288         168,134         90,207           1989         41,837         152,865         80,909           1990         41,837         152,865         80,909           1991         39,993         130,570         64,110           1993         17,718         83,182         30,542           1994         55,207         98,396         71,277           1997         55,207         98,396         71,942           1997         53,121         162,067         71,942           1999         53,121         162,040         80,163     <	121,365 90,345 90,345 80,577 106,212 142,967 111,884 114,515 152,495	1		60.5% 60.5% 60.2% 62.3% 62.3% 62.3% 62.8% 60.8%	1   1   1   1   1   1   1   1   1   1
1978         50,356         157,467         71,009           1979         33,418         124,000         56,927           1981         27,916         116,694         52,661           1982         39,776         123,052         66,436           1984         39,776         123,052         66,436           1984         58,875         150,889         84,092           1984         58,875         162,666         60,331           1985         47,181         157,399         67,334           1988         47,181         157,399         67,334           1989         47,181         157,399         67,334           1990         41,837         152,865         80,909           1991         39,993         130,570         64,110           1994         55,207         98,396         71,277           1996         46,764         164,262         71,942           1997         46,764         162,176         74,549           1997         53,121         162,040         80,163           1999         53,122         162,040         80,163           1999         55,797         64,16         77,5370	121,365 90,345 90,345 80,577 106,212 142,967 111,884 111,884 111,884 114,515 152,495			60.5% 60.2% 60.2% 62.3% 62.2% 60.8% 58.4%	
1979       33,418       124,000       56,927         1981       27,916       116,694       52,661         1982       39,776       123,052       66,436         1984       52,238       150,889       84,092         1985       51,553       162,666       60,331         1985       51,553       162,666       60,331         1987       47,181       157,399       67,334         1988       62,286       168,134       90,207         1990       41,837       152,865       64,110         1991       39,993       130,570       64,110         1993       17,718       83,182       30,542         1994       55,207       98,396       71,277         1995       46,764       164,262       71,277         1996       46,764       162,176       74,549         1997       53,121       162,040       80,163         1999       53,122       162,040       80,163	90,345 90,345 80,577 106,212 142,967 111,884 111,884 111,884 111,515 114,515				198 198 198
1980       139,134       83,490         1981       27,916       116,694       52,661         1982       39,776       123,052       66,436         1984       58,875       150,889       84,092         1985       51,553       162,666       60,331         1986       47,181       157,399       67,334         1988       62,288       168,134       90,309         1990       41,837       152,865       80,909         1991       39,993       130,570       64,110         1992       46,746       107,301       20,323         1994       55,207       98,396       71,277         1996       46,764       162,776       74,549         1997       53,121       162,176       74,549         1999       53,122       162,040       80,163         1999       53,122       162,040       80,163	106,212 80,577 80,577 106,212 142,967 111,884 111,884 114,515 152,495	1	1		198
1981         27,916         116,694         52,661           1982         39,776         123,052         66,436           1983         52,238         115,689         84,092           1984         58,875         162,666         60,331           1985         51,553         162,666         60,331           1987         47,181         157,399         67,334           1988         62,286         168,134         90,207           1990         41,837         152,865         80,909           1991         39,993         130,570         64,110           1993         17,718         83,182         30,542           1994         55,207         98,396         71,277           1995         64,764         164,262         71,277           1996         46,764         164,262         71,942           1997         53,121         162,040         80,163           1999         53,122         162,040         80,163	106,212 106,212 142,967 111,884 111,884 114,515 152,495	1   1   1   1   1   1   1   1   1   1			198 198 198 198
1982         39,776         123,052         66,436           1984         58,875         150,889         84,092           1985         51,553         162,666         60,331           1985         51,553         162,666         60,331           1986         47,181         157,399         67,334           1987         47,181         157,399         67,334           1988         62,288         168,134         90,207           1990         41,837         152,865         80,909           1991         39,993         130,570         64,14           1993         17,718         83,182         30,542           1994         55,207         98,396         71,277           1996         46,764         164,262         71,942           1997         46,764         162,176         74,549           1997         53,121         162,040         65,370           1999         55,797         162,040         65,161	106,212 106,212 142,967 111,884 114,515 152,495	1 dd   dd   1   1   1   1   1   1   1	37.7% 37.8% 39.2% 41.6%		198 198 198
1983   1984   52,238   1119,930   123,032   1984   58,875   150,889   84,092   1985   51,553   162,666   60,331   60,331   1987   47,181   157,399   67,334   67,334   1990   41,837   152,865   80,909   1991   39,993   130,570   64,110   20,207   1994   55,207   98,396   71,277   1995   17,718   83,182   30,542   71,277   1996   46,764   164,262   71,942   74,549   162,176   162,040   80,163   155,797   162,040   80,163   155,797   162,040   80,163   155,797   162,040   80,163   155,797   162,040   80,163   155,797   162,040   80,163   155,797   162,040   80,163   155,797   162,040   80,163   155,797   162,040   80,163   155,797   162,040   176,041   176,041   176,04	106,212 142,967 142,967 111,884 111,884 114,515 152,495		37.8% 39.2% 41.6%	11	198 198 198
1964         58,875         150,889         84,092           1965         51,553         162,666         60,331           1965         51,553         162,666         60,331           1965         58,665         1157,399         67,334           1987         47,181         157,399         67,334           1988         62,286         168,134         90,207           1990         41,837         152,865         80,909           1991         39,993         130,570         64,110           1993         17,718         83,182         30,542           1994         55,207         98,396         71,277           1995         46,764         164,262         71,942           1996         46,764         164,262         71,942           1997         53,121         162,176         74,549           1998         53,122         162,040         80,163           1999         55,797         162,040         80,163	186,202 142,967 111,884 1127,798, 114,515 152,495	1 dd	39.2% 41.6%		198 198 198
1964         56,675         150,889         84,092           1965         51,553         162,666         60,331           1987         47,181         157,399         67,334           1988         62,286         168,134         90,207           1990         41,837         152,865         80,909           1991         39,993         130,570         64,110           1992         17,718         83,182         30,542           1993         17,718         83,182         30,542           1994         55,207         98,396         71,277           1996         46,764         164,262         71,942           1997         53,121         162,176         74,549           1999         55,797         162,076         80,163           1999         55,797         162,076         80,163	HO   P9   1     P9   2	385,381 391,053 382,649 354,197	39.2% 41.6%		198
1965       51,553       162,666       60,331         1987       47,181       157,399       67,334         1988       62,288       168,134       90,207         1990       41,837       152,865       80,909         1991       39,993       130,570       64,110         1993       17,718       83,182       30,542         1994       55,207       98,396       71,277         1996       46,764       164,262       74,549         1997       53,121       162,176       74,549         1999       53,122       162,040       80,163         1999       55,797       162,040       80,163	HO	391,053 382,649 354,197	41.6%		198
1986       47,181       157,399       67,334         1987       47,181       157,399       67,334         1988       62,288       168,134       90,207         1990       41,837       152,865       80,909         1991       39,993       130,570       64,110         1992       17,718       83,182       30,542         1994       55,207       98,396       71,277         1996       46,764       164,262       71,942         1997       53,121       162,176       74,549         1999       53,122       162,007       162,007         1999       55,797       162,040       80,163	1	382,649 354,197	44.2%		The second of the second
1987       47,181       157,399       67,334         1988       62,288       168,134       90,207         1990       41,837       152,865       80,909         1991       39,993       130,570       64,110         1992       17,718       83,182       30,542         1994       55,207       98,396       71,277         1996       46,764       164,262       71,277         1997       53,121       162,176       74,549         1998       53,122       1162,176       74,549         1999       55,797       162,040       80,163	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	354,197		***********	
1988       62,288       168,134       90,207         1990       41,837       152,865       80,909         1991       39,993       130,570       64,110         1992       17,718       83,182       30,542         1994       55,207       98,396       71,277         1996       46,764       164,262       71,277         1997       53,121       162,176       74,549         1999       53,122       162,040       80,163         1999       55,797       162,040       80,163			44.4%	55.6%	
1990       41,837       152,865       80,909         1991       39,993       130,570       64,110         1991       39,993       130,570       64,110         1992       17,718       83,182       30,542         1994       55,207       98,396       71,277         1996       46,764       164,262       71,942         1997       53,121       162,176       74,549         1998       53,122       162,040       80,163         2000       67,64       162,040       80,163		394,808	42.6%		1990
1990         41,837         152,865         80,909           1991         39,993         130,570         64,110           1992         17,718         83,182         30,542           1994         55,207         98,396         71,277           1996         46,764         164,262         71,942           1997         53,121         162,176         74,549           1998         53,122         162,007         80,163           1999         55,797         162,040         80,163	İ	384,164		968:89:	THE 11 1991
1991       39,993       130,570       64,110         1992       17,718       83,182       30,542         1994       55,207       98,396       71,277         1996       46,764       164,262       71,942         1997       53,121       162,176       74,549         1999       55,797       162,040       80,163         2000       67,992       176,944       80,163	122,746	392,395	39.0%	61.0%	
1992       25,47£       107,301       20,323;         1993       17,718       83,182       30,542         1994       55,207       98,396       71,277         1995       46,764       164,262       71,942         1997       53,121       162,176       74,549         1998       53,122       162,040       80,163         2000       67,997       176,941       05,161	104,103	344,003	38.0%		1993
1993     17,718     83,182     30,542       1994     55,207     98,396     71,277       1996     46,764     164,262     71,942       1997     53,121     162,176     74,549       1998     53,122     162,007     80,163       1999     55,797     162,040     80,163       2000     67,992     176,944     80,163	76Z/5¢	272,643	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	<b>%9</b> 109::::::	1994
1994     55,207     98,396     71,277       46,764     164,262     71,942       1997     53,121     162,176     74,549       1998     53,122     162,007     75,370       1999     55,797     162,040     80,163       2000     67,992     176,941     05,163	48,260	198,157			1995
1996       46,764       164,262       71,942         1997       53,121       162,176       74,549         1998       11122       162,007       75,370         1999       55,797       162,040       80,163         2000       67,902       176,941       96,163		220,538			1996
1996     46,764     164,262     71,942       1997     53,121     162,176     74,549       1998     53,122     162,007     175,370       1999     55,797     162,040     80,163       2000     67,992     176,944     95,163	1 H 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	317,164	42.6%	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	1997
1997     53,121     162,176     74,549       78,549     78,549       1999     55,797     162,040     80,163       2000     67,992     176,941     95,163		387,610	42.4%		1998
1999 55,797 162,040 80,163 2000 178,040 80,163 2000 2000 67 999 478 989,183	127,670	388,796	41.7%	٠	1999
55,797 162,040 80,163 67,992 176,941 95,464	128,492	101	HILLE 11:40,8%		2000
67 992 176 944 95 164			41.3%		2001
110,511	163,153	427,605	41.4%		2002
172,015	120,926		1 % 1 % 1 % 1 % 1 % 1 % 1 % 1 % 1 % 1 %	10 10 10 10 10 10 10 10 10 10 10 10 10 1	200
2002 43,863 160,081 72,634	116,497	400,576	40.0%		2004
2003 28,776 120,865 53,191		319,390			2005
5,800	36,713	(.9° t) (.9° t) (.9° t) (.9° t) (.9° t) (.9° t) (.9° t)	1 10 1 1 10 1 1 1 1 1 1 1 1 1 1 1 1	60 1 4 60 1 4 60 1 4 60 1 4 60 1 4 61 1 4 61 1 4 61 1 4 61 1 4	2006
4,712 39,288 27,780		151,172		<u> </u>	2007
	46,600	115,805	21.0%	<u> </u>	2008
1 1 1 1 1 1 1 1	13 88	11.584	20.8%	1000 1000 1000 1000 1000 1000 1000 100	5000
23,224	32.492	11.584	20.8%	79.2%	2010