

From Lee Orton
Cost ↑ of 80K.
<Split Chgs>
FYI piece

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.)

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:

	<u>EXAMPLE 1</u>	<u>EXAMPLE 2</u>	<u>DIFFERENCE</u>
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	\$22,400
		TOTAL	\$64,500

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

	<u>EXAMPLE 1</u>	<u>EXAMPLE 2</u>	<u>DIFFERENCE</u>
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	\$22,400
		TOTAL	\$64,500

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

EXAMPLE 1

Corps of Engineers
HARLAN COUNTY DAM

Revised: 1/20/2006

Year	Bostwick in Nebraska		Kansas-Bostwick No.2		3-Year Total Annual Divisions	3-Year Total Divisions	Percentage Nebraska	Distribution Kansas	Use For Year
	(a) Annual Divisions	(b) 3-Year Total Divisions	(c) Annual Divisions	(d) 3-Year Total Divisions					
1972	48,713	--	50,701	--	99,414	--	--	--	--
1973	53,569	--	50,635	--	104,204	--	--	--	--
1974	56,204	158,486	80,126	181,462	339,948	46.6%	53.4%	1984	
1975	52,810	162,583	79,574	210,335	372,918	43.6%	56.4%	1985	
1976	66,885	175,899	110,406	270,106	446,005	39.4%	60.6%	1985	
1977	40,226	159,921	59,353	249,333	409,254	39.1%	60.9%	1988	
1978	50,356	157,467	71,009	240,768	398,235	39.5%	60.5%	1988	
1979	33,418	124,000	56,927	187,289	311,289	39.8%	60.2%	1988	
1980	55,360	139,134	83,490	211,426	350,560	39.7%	60.3%	1988	
1981	27,916	116,694	52,661	193,078	309,772	37.7%	62.3%	1988	
1982	39,776	123,052	66,436	202,587	325,639	37.8%	62.2%	1988	
1983	52,238	119,930	83,964	203,061	322,991	37.1%	62.9%	1985	
1984	58,875	150,889	84,092	234,492	385,381	39.2%	60.8%	1985	
1985	51,553	162,666	60,331	228,387	391,053	41.6%	58.4%	1987	
1986	58,665	169,093	69,133	213,556	382,649	44.2%	55.8%	1988	
1987	47,181	157,399	67,334	196,798	354,197	44.4%	55.6%	1989	
1988	62,288	168,134	90,207	226,674	394,808	42.6%	57.4%	1990	
1989	48,740	158,209	68,414	225,955	384,164	41.2%	58.8%	1991	
1990	41,837	152,865	80,909	239,530	392,395	39.0%	61.0%	1992	
1991	39,993	130,570	64,110	213,433	344,003	38.0%	62.0%	1993	
1992	25,471	107,301	20,323	165,342	272,643	39.4%	60.6%	1994	
1993	17,718	83,182	30,542	114,975	198,157	42.0%	58.0%	1995	
1994	55,207	98,396	71,277	122,142	220,538	44.6%	55.4%	1996	
1995	62,291	135,216	80,129	181,948	317,164	42.6%	57.4%	1997	
1996	46,764	164,262	71,942	223,348	387,610	42.4%	57.6%	1998	
1997	53,121	162,176	74,549	226,620	388,796	41.7%	58.3%	1999	
1998	53,122	153,007	75,370	221,881	374,868	40.8%	59.2%	2000	
1999	55,797	162,040	80,163	230,082	392,122	41.3%	58.7%	2001	
2000	67,992	176,911	95,161	250,694	427,605	41.4%	58.6%	2002	
2001	48,226	172,015	72,700	248,024	420,039	41.0%	59.0%	2003	
2002	43,863	160,081	72,634	240,495	400,576	40.0%	60.0%	2004	
2003	28,776	120,865	53,191	198,525	319,390	37.8%	62.2%	2005	
2004	5,800	78,439	30,913	156,788	235,177	33.4%	66.6%	2006	
2005	4,712	39,288	27,780	111,884	151,172	26.0%	74.0%	2007	
est. 2006	0	10,512	46,600	105,293	115,805	9.1%	90.9%	2008	
est 2007	4,712	9,424	27,780	102,160	111,584	8.4%	91.6%	2009	
est 2008	4,712	9,424	27,780	102,150	111,584	8.4%	91.6%	2010	

Data to fill in columns (1) and (3) can be found in Table 6 of AOP

COST DISTRIBUTION PERCENTAGES

EXAMPLE 2

Corps of Engineers
HARLAN COUNTY DAM

Revised: 1/20/2006

Year	Boswick in Nebraska		Kansas: Boswick No. 2		Total Annual Diversion	3 Year Total Diversion	Percentage Nebraska	Distribution Kansas	Use For Year
	Annual Diversion	3-Year Total Diversion	Annual Diversion	3-Year Total Diversion					
1972	48,713	--	50,701	--	99,414	--	--	--	--
1973	53,569	--	50,635	--	104,204	--	--	--	--
1974	56,204	158,486	80,126	181,462	136,330	339,948	46.6%	53.4%	1984
1975	52,810	162,583	79,574	210,335	132,384	372,918	43.6%	56.4%	1985
1976	66,885	175,899	110,406	270,106	177,291	446,005	39.4%	60.6%	1986
1977	40,226	159,921	59,353	249,333	99,579	409,254	39.1%	60.9%	1987
1978	50,356	157,467	71,009	240,768	121,365	398,235	39.5%	60.5%	1988
1979	33,418	124,000	56,927	187,289	90,345	311,289	39.8%	60.2%	1989
1980	55,360	139,134	83,490	211,426	138,850	350,560	39.7%	60.3%	1990
1981	27,916	116,694	52,661	193,078	80,577	309,772	37.7%	62.3%	1991
1982	39,776	123,052	66,436	202,587	106,212	325,639	37.8%	62.2%	1992
1983	52,238	119,930	83,964	203,061	136,202	322,991	37.1%	62.9%	1993
1984	58,875	150,889	84,092	234,492	142,967	385,381	39.2%	60.8%	1994
1985	51,553	162,666	60,331	228,387	111,884	391,053	41.6%	58.4%	1995
1986	58,665	169,093	69,133	213,556	127,798	382,649	44.2%	55.8%	1996
1987	47,181	157,399	67,334	196,798	114,515	354,197	44.4%	55.6%	1997
1988	62,288	168,134	90,207	226,674	152,495	394,808	42.6%	57.4%	1998
1989	48,740	158,209	68,414	225,955	117,154	384,164	41.2%	58.8%	1999
1990	41,837	152,865	80,909	239,530	122,746	392,395	39.0%	61.0%	2000
1991	39,993	130,570	64,110	213,433	104,103	344,003	38.0%	62.0%	2001
1992	25,471	107,301	20,323	165,342	45,794	272,643	39.4%	60.6%	2002
1993	17,718	83,182	30,542	114,975	48,260	198,157	42.0%	58.0%	2003
1994	55,207	98,396	71,277	122,142	126,484	220,538	44.6%	55.4%	2004
1995	62,291	135,216	80,129	181,948	142,420	317,164	42.6%	57.4%	2005
1996	46,764	164,262	71,942	223,348	118,706	387,610	42.4%	57.6%	2006
1997	53,121	162,176	74,549	226,620	127,670	388,796	41.7%	58.3%	2007
1998	53,122	153,007	75,370	221,861	128,492	374,868	40.8%	59.2%	2008
1999	55,797	162,040	80,163	230,082	135,960	392,122	41.3%	58.7%	2009
2000	67,992	176,911	95,161	250,694	163,153	427,605	41.4%	58.6%	2010
2001	48,226	172,015	72,700	248,024	120,926	420,039	41.0%	59.0%	est 2006
2002	43,863	160,081	72,634	240,495	116,497	400,576	40.0%	60.0%	est 2007
2003	28,776	120,865	53,191	198,525	81,967	319,390	37.8%	62.2%	est 2008
2004	5,800	78,439	30,913	156,738	36,713	235,177	33.4%	66.6%	est 2009
2005	4,712	39,288	27,780	111,884	32,492	151,172	26.0%	74.0%	est 2010
est 2006	13,800	24,312	32,600	91,493	46,600	115,805	21.0%	79.0%	
est 2007	4,712	23,224	27,780	88,360	32,492	111,584	20.8%	79.2%	
est 2008	4,712	23,224	27,780	88,360	32,492	111,584	20.8%	79.2%	

Data to fill in columns (1) and (3) can be found in Table 6 of AOP