

**KANSAS BOSTWICK IRRIGATION DISTRICT NO. 2**  
**528 MAIN STREET**  
**P. O. BOX 165**  
**COURTLAND, KANSAS 66939**

**BOARD OF DIRECTORS**

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BRAD D. PETERSON ----- Secretary  
MONTY D. DAHL ----- Treasurer  
DOUGLAS G. SIMMS ----- Attorney

**2007 PERSONNEL**

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DONALD LIEB ----- Office Manager  
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DAVID ALLEN ----- Dam Tender  
DAVID DAHL----- Watermaster  
RON ERICKSON----- Ditchrider  
PHILLIP ESSLINGER ----- Ditchrider  
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WILLIAM MAHIN, JR.----- Ditchrider  
DANIEL REYNOLDS ----- Ditchrider  
JACK SHUMARD ----- Ditchrider  
RYAN SOTHERS ----- Ditchrider  
DAVID WEIR ----- Ditchrider  
FREDERICK HURLBUTT----- Maintenance  
LUKE MAHIN ----- Part-time Maintenance  
CRYSTAL LIEB -----Part-time Office

2007 WEATHER CONDITIONS

MONTH	TEMP		PRECIP	AVE. PRECIP ' 60 to '00
	High	Low		
JAN	53	-5	0.60	0.53
FEB	66	-8	1.38	0.74
MAR	77	19	2.07	1.95
APR	88	17	1.82	2.44
MAY	90	47	6.68	4.98
JUN	92	50	5.05	4.17
JUL	98	61	2.26	3.78
AUG	103	60	2.36	3.34
SEP	90	44	2.27	3.11
OCT	91	31	3.22	1.91
NOV	75	11	0.08	1.35
DEC	63	-2	<u>2.40</u>	<u>0.84</u>
		Total	30.19	29.14

Moisture measured at Courtland amounted to a total of 30.19 inches, which is approximately 1.05 inches above the 40 year average. Checking the daily record shows that the most moisture measured in a 24 hour period was 2.60 inches on May 15<sup>th</sup>. Measurable precipitation was recorded at Courtland on 88 days during the year and 17 days recorded a trace.

The latest frost date last spring was April 16<sup>th</sup> when a low of 31 degrees was recorded. The temperature dropped to 32 degrees with the first fall frost on October 23<sup>rd</sup>.

**RAINFALL DATA**

YEAR	JAN-MAR	APR-JUNE	JULY-SEPT.	OCT-DEC	TOTAL
59	N/A	12.82	4.83	2.46	N/A
60	N/A	11.05	8.40	2.46	N/A
61	4.09	15.17	19.59	3.94	42.79
62	2.84	10.24	11.62	3.29	27.99
63	2.28	7.81	6.86	1.73	18.68
64	1.62	8.60	9.84	1.21	21.27
65	5.10	12.5	10.40	1.12	29.12
66	1.89	6.98	11.88	2.33	23.08
67	.64	15.84	11.87	2.86	31.18
68	.58	11.19	19.39	6.18	37.34
69	3.92	9.84	13.15	4.36	31.28
70	1.27	15.27	9.01	3.79	29.86
71	4.30	10.00	7.47	7.04	28.81
72	1.00	13.38	11.23	6.53	32.14
73	7.13	8.35	18.72	9.46	43.66
74	.97	9.91	4.59	3.71	19.18
75	3.36	13.06	5.82	3.73	25.97
76	4.73	7.81	3.81	1.03	17.38
77	3.99	16.61	15.72	3.41	39.73
78	2.21	10.23	10.13	3.66	26.23
79	7.74	8.50	8.75	6.43	31.42
80	6.47	7.39	7.56	2.85	28.24
81	1.64	14.09	10.93	4.54	31.20
82	4.04	12.48	10.69	5.06	32.27
83	3.95	8.74	9.5	4.17	23.36
84	3.38	14.77	3.45	7.90	29.50
85	2.10	12.03	13.06	2.37	29.56
86	1.84	10.67	14.01	6.53	33.05
87	8.19	15.48	6.26	2.81	32.74
88	1.31	10.27	5.76	2.03	19.37
89	1.68	7.30	13.70	1.05	23.73
90	4.15	10.82	6.38	2.10	23.45
91	1.98	8.99	3.66	4.19	18.82
92	4.34	8.92	17.61	9.14	40.01
93	5.90	12.62	24.07	2.67	45.26
94	1.64	10.92	7.55	4.49	24.60
95	2.32	14.69	9.74	1.40	28.15

**RAINFALL DATA CONTINUED**

YEAR	JAN-MAR	APR-JUNE	JULY-SEPT.	OCT-DEC	TOTAL
96	0.85	9.45	12.49	6.04	28.83
97	1.27	6.54	6.64	6.40	20.85
98	4.81	7.99	7.26	6.82	26.88
99	2.18	13.49	5.65	1.46	22.78
00	4.60	5.18	3.20	4.40	17.38
01	4.96	15.12	11.99	2.41	34.48
02	2.18	8.05	4.61	5.02	19.86
03	2.89	15.7	10.04	3.03	31.66
04	6.41	10.74	8.89	1.71	27.75
05	5.52	10.14	12.55	3.76	31.97
06	2.26	7.98	11.58	4.36	26.18
07	4.05	13.55	6.89	5.70	30.19

**O&M ASSESSMENTS FOR 2007– Blocks I, II, III, IV & V**

Class #1	25,513.3 acres
Class #2	9,220.5 acres
Class #3	5,685.2 acres
Class #4	<u>2,624.4 acres</u>
Total District acres	43,043.4 acres

Note: 13,445.0 acres above Lovell were assessed a flat rate of \$16.00 /acre  
 29,598.4 acres below Lovewell were assessed at class #1 @ \$22.00/ac  
 class #2 @ \$22.00/ac, class #3 @ \$21.25/ac and class #4 @ \$21.25/ac

Total O&M Assessments for 2007 are \$862,825,23

**REPAYMENT ASSESSMENTS FOR 2007**

No repayment assessed for 2007

**INFORMATION FROM CROP CENSUS**

Irrigated acres above Lovewell 8,923	Irrigated acres below Lovewell 24,055	Total 32,978
Gross crop values above \$4,918,357 \$551/acre	Gross crop values below \$14,170,074 \$589/acre	Total \$19,088,431 \$578/acre
Irrigated acres Jw Co. 5,557	Irrigated acres Rp Co. 27,389	
Gross crop values Jw Co. \$2,958,291 523/acre	Gross crop values Rp Co. \$16,130,139 \$588/acre	

Crop values

Corn \$3.50/bu, Milo \$3.50/bu, Hay \$100/ton, Soybeans \$8.00/bu, Silage \$27/ton

Crop yields above Lovewell	Crop yields below Lovewell	Above and Below
Corn 169 bu/ac	corn 185 bu/ac	corn 182 bu/ac
Milo 118 bu/ac	milo 135 bu/ac	milo 126 bu/ac
Hay 6.6 ton/ac	hay 6.8 ton/ac	hay 6.7 ton/ac
Beans 55 bu/ac	beans 55 bu/ac	beans 55bu/ac
		Silage 20 t/ac

Water delivered above 5.3"/ac	Water delivered below 7.0"/ac	Dist avg. 6.5"/ac
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The first water deliveries were made on the 20<sup>th</sup> of June with Aug 29<sup>th</sup> being the day farm turnouts were shut down for the year.

**CROP YIELDS**

YEAR	CORN	MILO	BEANS	ALFALFA	SUNFLOWERS
1961	84.0	60.0	24.0	0	0
1962	100.0	88.0	30.0	0	0
1963	85.0	73.0	34.0	0	0
1964	95.0	74.0	24.0	0	0
1965	115.0	97.0	24.0	0	0
1966	95.0	91.0	33.0	0	0
1967	120.0	87.0	32.0	0	0
1968	99.0	72.0	25.0	0	0
1969	107.0	84.0	42.0	0	0
1970	92.0	49.0	25.0	0	0
1971	114.0	90.0	10.0	0	0
1972	129.0	101.0	43.0	0	0
1973	103.0	101.0	28.0	0	0
1974	102.0	81.0	30.0	0	0
1975	107.0	78.0	33.0	0	0
1976	103.0	90.0	44.0	0	0
1977	103.0	107.0	43.0	0	0
1978	123.1	103.6	45.8	0	0
1979	123.1	103.6	45.8	0	0
1980	94.7	63.6	45.2	0	0
1981	134.6	68.9	46.2	0	0
1982	108.0	99.0	37.5	0	0
1983	106.2	78.0	43.6	0	0
1984	139.0	85.8	42.5	0	0
1985	140.5	101.1	44.9	0	0
1986	148.7	131.8	50.4	0	0
1987	137.3	103.7	47.4	0	0
1988	135.2	80.5	46.1	0	0
1989	158.8	85.5	49.0	0	0
1990	139.0	99.0	42.0	5.0	0
1991	110.6	*154.0	39.3	4.0	0
1992	166.0	0	45.8	0	0
1993	92.0	0	36.2	0	0
1994	153.4	0	53.7	6.0	0
1995	135.8	72.8	48.1	4.5	2,613.3
1996	163.9	138.6	54.2	4.7	0
1997	166.6	114.7	58.7	5.0	5
1998	157.6	101.3	54.8	5.3	5.3
1999	165.4	0	*58.6	5.6	0
2000	143.4	0	47.6	2.0	0
2001	155.0	92.8	47.7	6.1	0
2002	162.0	102.0	47.0	7.6	0
2003	160.7	124.2	49.9	5.6	1,943.5
2004	180.4	134.2	54.8	*8.9	1,750.0

2005            \*187.0            119.7            58.0            7.6            1,330.2

**CROP YIELDS CONTINUED**

Year	Corn	Milo	Beans	Alfalfa	Sunflowers
2006	162.6	110.5	54.9	6.3	0
2007	181.6	126.5	55.2	6.8	0

0 may indicate not enough acres reported.

\* record, highest year recorded.

**INFORMATION FROM CROP CENSUS**

YEAR	CLASSIFIED ACRES	IRRIGATED ACRES	AF DEL'D	INCHES/AC
1958	10,043	N/A	4,383	N/A
1959	30,521	N/A	29,861	N/A
1960	31,979	20,455	27,041	15.8
1961	36,912	21,962	27,051	14.7
1962	36,934	22,395	23,326	12.4
1963	37,206	25,117	36,973	17.6
1964	37,286	22,892	41,948	21.9
1965	37,478	24,118	36,634	18.2
1966	38,386	24,063	38,195	19.0
1967	39,039	28,000	38,418	16.4
1968	40,325	28,000	32,566	13.9
1969	39,565	25,500	23,161	10.8
1970	39,828	27,736	52,959	22.9
1971	39,746	28,634	38,433	16.1
1972	40,120	26,515	26,168	11.8
1973	40,330	30,528	25,394	9.9
1974	40,631	29,907	51,507	20.7
1975	40,947	31,71	49,525	18.7
1976	41,118	30,789	# 69,206	27.0
*1977	41,118	32,248	30,934	11.5
*1978	41,118	33,909	34,335	12.9
*1979	41,468	33,529	29,015	10.4
1980	41,499	33,232	49,626	17.7
*1981	41,892	32,892	22,995	8.3
1982	41,862	33,980	30,963	10.9
1983	41,862	26,222	48,409	22.1
1984	41,883	30,048	48,121	19.2
1985	41,888	31,410	28,224	10.7
1986	41,910	32,085	34,082	12.7
1987	41,945	33,585	36,214	12.9
1988	41,960	29,862	51,016	20.5
*1989	41,987	35,696	39,335	13.2
*1990	41,988	36,667	43,874	14.3
*1991	42,488	30,881	32,621	12.7
*1992	42,458	23,589	4,116	2.1
*1993	42,537	33,858	# 3,326	1.2

1994	42,523	34,933	15,796	5.4
1995	42,523	38,485	42,828	13.4

**INFORMATION FROM CROP CENSUS CONTINUED**

YEAR	CLASSIFIED ACRES	IRRIGATED ACRES	AF DEL'D	INCHES/AC
1996	42,574	35,431	41,074	13.9
1997	42,574	38,985	40,196	12.4
1998	42,547	38,485	41,279	12.9
1999	42,650	38,788	44,734	13.8
2000	42,863	40,711	58,498	17.2
*2001	42,805	39,173	39,243	12.0
*2002	42,922	39,499	43,576	13.2
*2003	43,021	36,460	29,108	9.6
*2004	43,114	23,035	15,632	8.1
*2005	43,100	23,439	15,632	5.8
*2006	43,048	28,580	20,636	7.4
*2007	43,018	32,979	26,303	6.5

\* YEARS OF SHORT SUPPLY, START SEASON WITH RESTRICTIONS  
# HIGHEST - LOWEST USE



**VALUE OF ACTUAL IRRIGATED CROPS FROM CROP CENSUS**

YEAR	\$ GROSS	\$ PER/ACRE	ACRE
1970	3,882,835.00	140.00	27,736
1971	3,611,674.76	126.15	28,634
1972	5,114,061.00	192.87	26,515
1973	7,006,234.00	229.50	30,528
1974	9,278,426.00	310.24	29,907
1975	8,278,426.00	260.66	31,741
1976	6,846,199.25	222.29	30,798
1977	5,915,316.01	183.43	32,248
1978	7,618,348.80	238.75	31,909
1979	9,690,680.00	289.02	33,529
1980	9,597,194.54	288.79	33,232
1981	9,799,445.00	297.93	32,892
1982	8,313,569.92	244.66	33,980
1983	8,293,717.20	316.29	26,222
1984	9,922,025.00	330.21	30,048
1985	9,081,424.00	289.13	31,410
1986	7,015,931.65	218.67	32,085
1987	7,039,321.40	209.60	33,585
1988	9,938,060.00	332.80	29,762
1989	11,439,457.00	320.46	35,696
1990	10,407,855.94	283.84	36,667
1991	7,712,559.42	249.75	30,881
1992	7,620,389.10	323.05	23,589
1993	7,493,859.30	221.33	33,858
1994	10,636,665.00	304.49	34,933
1995	13,899,728.33	361.17	38,485
1996	13,463,982.00	380.00	35,431
1997	15,349,478.00	393.73	38,985
1998	11,410,761.21	296.49	38,486
1999	11,856,609.01	305.68	38,788
2000	10,666,977.55	262.02	40,711
2001	10,725,896.65	273.81	39,234
2002	14,809,851.00	375.42	39,449
2003	12,308,765.65	337.60	36,460
2004	6,825,529.50	296.32	23,035
2005	6,908,992.63	294.76	23,439
2006	12,201,642.00	427.00	28,580
2007	19,088,431.06	578.81	32,979

**PIPE – DITCH – PIVOT SURVEY**

This survey was first run in 1990. Pivot acres were counted as pipe and the results were 54% pipe and 46% open ditch.

YEAR	OPEN DITCH	PIPE	PIVOT	DRIP	ACRES
2006	13%	45%	42%	.9%	43,072
2002	17%	56%	27%		42,921
1998	29%	59%	12%		42,421
1994	38%	58%	4%		42,531
1990	46%	54%	0%		42,462

2006 SURVEY BY RIDE

RIDE	OPEN DITCH	PIPE	PIVOT	DRIP	ACRES
1	115.3 – 69%	910.3 – 9%	282.2 – 22%		1,307.8
2	308.9 – 9%	1,657.4 – 49%	1,421.4 – 42%		3,387.7
3	1,053.7 – 21%	1,580.5 – 32%	2,322.7 – 47%		4,956.9
4	959.2 – 23%	1,577.6 – 38%	1,584.9 – 39%		4,121.7
5	6.5 – .6%	368.7 – 36%	657.4 – 64%		1,032.6
6	386.2 – 8%	3,090.4 – 65%	1,270.0 – 27%		4,746.6
7	760.4 – 15%	2,203.2 – 44%	2,054.2 – 40%	45.8 – .9%	5,052.9
8	616.9 – 13%	2,815.1 – 58%	1,401.9 – 29%		4,833.9
9	62.6 – 1%	1,547.4 – 15%	3,056.1 – 65%		4,666.1
10	788.2 – 15%	1,138.9 – 22%	3,217.1 – 63%		5,144.2
11	367.0 – 9%	2,600.2 – 69%	854.7 – 22%		3,821.9
Total	5,424.9 – 13%	19,489.7 – 45%	18,111.9 – 42%	45.8 – .9%	43,072.3

BOR GI - 5

BOR McCOOK - 2

KS WATER OFFICE - 1

KS AGRI DIV WATER RESOURCES - 2

DALE SHANNON - 1

KANSAS STATE RESEARCH & EXTENSION  
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HOLLY BIGGE  
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MANHATTAN KS 66506

BOR BILLINGS - 3

DOUG SIMMS - 1

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