

Republican River Compact Administration

Compact Accounting

Spreadsheet name: RRCA_AccountingFor2003.xls

Last update: 1/12/2005

Notes on future work:

Link the input page for returns from Bureau projects to Attachment 7

	A	B	C
1	Calendar Year		2003
2			
3	Groundwater Data		
4	North Fork Subbasin	GW CBCU Colorado	14,023
5		GW CBCU Kansas	17
6		GW CBCU Nebraska	1,402
7	Arikaree Subbasin	GW CBCU Colorado	242
8		GW CBCU Kansas	100
9		GW CBCU Nebraska	508
10	Buffalo Subbasin	GW CBCU Colorado	265
11		GW CBCU Kansas	0
12		GW CBCU Nebraska	3,338
13	Rock Subbasin	GW CBCU Colorado	59
14		GW CBCU Kansas	0
15		GW CBCU Nebraska	3,419
16	South Fork Subbasin	GW CBCU Colorado	12,115
17		GW CBCU Kansas	5,351
18		GW CBCU Nebraska	1,347
19	Frenchman Subbasin	GW CBCU Colorado	37
20		GW CBCU Kansas	0
21		GW CBCU Nebraska	85,647
22	Driftwood Subbasin	GW CBCU Colorado	0
23		GW CBCU Kansas	0
24		GW CBCU Nebraska	1,391
25	Red Willow Subbasin	GW CBCU Colorado	0
26		GW CBCU Kansas	0
27		GW CBCU Nebraska	7,815
28	Medicine Creek Sub	GW CBCU Colorado	0
29		GW CBCU Kansas	0
30		GW CBCU Nebraska	21,139
31	Beaver Subbasin	GW CBCU Colorado	0
32		GW CBCU Kansas	274
33		GW CBCU Nebraska	777
34	Sappa Subbasin	GW CBCU Colorado	0
35		GW CBCU Kansas	-274
36		GW CBCU Nebraska	500
37	Prairie Dog Subbasin	GW CBCU Colorado	0
38		GW CBCU Kansas	1,679
39		GW CBCU Nebraska	0
40	Mainstem Subbasin	GW CBCU Colorado	132
41		GW CBCU Kansas	110
42		GW CBCU Nebraska Above Guide Rock	74,323
43		GW CBCU Nebraska Below Guide Rock	2,559
44			
45	Import Water Data		
46	North Fork Subbasin	Imported Water Nebraska	0
47	Arikaree Subbasin	Imported Water Nebraska	0
48	Buffalo Subbasin	Imported Water Nebraska	0
49	Rock Subbasin	Imported Water Nebraska	0
50	South Fork Subbasin	Imported Water Nebraska	0
51	Frenchman Subbasin	Imported Water Nebraska	0
52	Driftwood Subbasin	Imported Water Nebraska	0
53	Red Willow Subbasin	Imported Water Nebraska	20
54	Medicine Creek Sub	Imported Water Nebraska	9,423
55	Beaver Subbasin	Imported Water Nebraska	0
56	Sappa Subbasin	Imported Water Nebraska	0
57	Prairie Dog Subbasin	Imported Water Nebraska	0
58	Mainstem Subbasin	Imported Water Nebraska Above Guide Rock	337
59		Imported Water Nebraska Below Guide Rock	0
60		Total	9,780
61	SW Pumping Data		
62	North Fork Subbasin	SW Diversions - Irrigation - Non-Federal Canals- Colorado	2,410
63		SW Diversions - Irrigation - Small Pumps - Colorado	0
64		SW Diversions - M&I - Colorado	0
65	Arikaree Subbasin	SW Diversions - Irrigation - Non-Federal Canals- Colorado	0
66		SW Diversions - Irrigation - Small Pumps - Colorado	0
67		SW Diversions - M&I - Colorado	0
68		SW Diversions - Irrigation - Non-Federal Canals- Kansas	0
69		SW Diversions - Irrigation - Small Pumps - Kansas	0
70		SW Diversions - M&I - Kansas	0
71		SW Diversions - Irrigation - Non-Federal Canals - Nebraska	0
72		SW Diversions - Irrigation - Small Pumps - Nebraska	0
73		SW Diversions - M&I - Nebraska	0
74	Buffalo Subbasin	SW Diversions - Irrigation - Non-Federal Canals- Colorado	0
75		SW Diversions - Irrigation - Small Pumps - Colorado	0
76		SW Diversions - M&I - Colorado	0
77		SW Diversions - Irrigation - Non-Federal Canals - Nebraska	587
78		SW Diversions - Irrigation - Small Pumps - Nebraska	70
79		SW Diversions - M&I - Nebraska	0
80	Rock Subbasin	SW Diversions - Irrigation - Non-Federal Canals - Nebraska	0
81		SW Diversions - Irrigation - Small Pumps - Nebraska	0
82		SW Diversions - M&I - Nebraska	0
83	South Fork Subbasin	SW Diversions - Irrigation - Non-Federal Canals- Colorado	996
84		SW Diversions - Irrigation - Small Pumps - Colorado	0
85		SW Diversions - M&I - Colorado	0
86		SW Diversions - Irrigation - Non-Federal Canals- Kansas	0
87		SW Diversions - Irrigation - Small Pumps - Kansas	39
88		SW Diversions - M&I - Kansas	0
89		SW Diversions - Irrigation - Non-Federal Canals - Nebraska	0

	A	B	C
1	Calendar Year		2003
2			
90		SW Diversions - Irrigation - Small Pumps - Nebraska	0
91		SW Diversions - M&I - Nebraska	0
92	Frenchman Subbasin	SW Diversions - Irrigation - Non-Federal Canals - Nebraska	0
93		SW Diversions - Irrigation - Small Pumps - Nebraska	3
94		SW Diversions - M&I - Nebraska	0
95	Driftwood Subbasin	SW Diversions - Irrigation - Non-Federal Canals- Kansas	0
96		SW Diversions - Irrigation - Small Pumps - Kansas	0
97		SW Diversions - M&I - Kansas	0
98		SW Diversions - Irrigation - Non-Federal Canals - Nebraska	0
99		SW Diversions - Irrigation - Small Pumps - Nebraska	0
100		SW Diversions - M&I - Nebraska	0
101	Red Willow Subbasin	SW Diversions - Irrigation - Non-Federal Canals - Nebraska	0
102		SW Diversions - Irrigation - Small Pumps - Nebraska	341
103		SW Diversions - M&I - Nebraska	0
104	Medicine Creek Sub	SW Diversions - Irrigation - Non-Federal Canals - Nebraska	0
105		SW Diversions - Irrigation - Small Pumps - Nebraska	291
106		SW Diversions - M&I - Nebraska	0
107		SW Diversions - Irrigation - Non-Federal Canals - Nebraska -Below Gage	0
108		SW Diversions - Irrigation - Small Pumps -Nebraska - Below Gage	106
109		SW Diversions - M&I - Nebraska - Below Gage	0
110	Beaver Subbasin	SW Diversions - Irrigation -Non-Federal Canals- Colorado	0
111		SW Diversions - Irrigation - Small Pumps - Colorado	0
112		SW Diversions - M&I - Colorado	0
113		SW Diversions - Irrigation - Non-Federal Canals- Kansas	0
114		SW Diversions - Irrigation - Small Pumps - Kansas	26
115		SW Diversions - M&I - Kansas	0
116		SW Diversions - Irrigation - Non-Federal Canals - Nebraska	0
117		SW Diversions - Irrigation - Small Pumps - Nebraska	0
118		SW Diversions - M&I - Nebraska	0
119		SW Diversions - Irrigation - Non-Federal Canals - Nebraska -Below Gage	
120		SW Diversions - Irrigation - Small Pumps -Nebraska - Below Gage	
121		SW Diversions - M&I - Nebraska - Below Gage	
122	Sappa Subbasin	SW Diversions - Irrigation - Non-Federal Canals- Kansas	0
123		SW Diversions - Irrigation - Small Pumps - Kansas	14
124		SW Diversions - M&I - Kansas	0
125		SW Diversions - Irrigation - Non-Federal Canals - Nebraska	0
126		SW Diversions - Irrigation - Small Pumps - Nebraska	0
127		SW Diversions - M&I - Nebraska	0
128		SW Diversions - Irrigation - Non-Federal Canals - Nebraska -Below Gage	0
129		SW Diversions - Irrigation - Small Pumps -Nebraska - Below Gage	20
130		SW Diversions - M&I - Nebraska - Below Gage	0
131	Prairie Dog Subbasin	SW Diversions - Irrigation - Non-Federal Canals- Kansas	0
132		SW Diversions - Irrigation - Small Pumps - Kansas	273
133		SW Diversions - M&I - Kansas	548
134		SW Diversions - Irrigation - Non-Federal Canals - Nebraska -Below Gage	0
135		SW Diversions - Irrigation - Small Pumps -Nebraska - Below Gage	59
136		SW Diversions - M&I - Nebraska - Below Gage	0
137	Mainstem Subbasin	SW Diversions - Irrigation - Non-Federal Canals- Kansas	0
138		SW Diversions - Irrigation - Small Pumps - Kansas	1,064
139		SW Diversions - M&I - Kansas	0
140		SW Diversions - Irrigation - Non-Federal Canals - Nebraska	3,719
141		SW Diversions - Irrigation - Small Pumps - Nebraska	1,401
142		SW Diversions - M&I - Nebraska	0
143		SW Diversions - Irrigation - Non-Federal Canals - Nebraska Below Guide Rock	0
144		SW Diversions - Irrigation - Small Pumps - Nebraska Below Guide Rock	1,562
145		SW Diversions - M&I - Nebraska - Below Guide Rock	0
146			
147	Non-Federal SW Consumptive Use		
148		% Non-Federal Canal Diversion Consumed	60%
149		% Small Surface Water Pumps Consumed	75%
150		% Municipal And Industrial SW Consumed	50%
151			
152	Non-Federal Reservoir Evaporation Data		
153	North Fork Subbasin	Non-Federal Reservoir Evaporation - Colorado	0
154		Non-Federal Reservoir Evaporation - Nebraska	
155	Arikaree Subbasin	Non-Federal Reservoir Evaporation - Colorado	0
156		Non-Federal Reservoir Evaporation - Kansas	0
157		Non-Federal Reservoir Evaporation - Nebraska	0
158	Buffalo Subbasin	Non-Federal Reservoir Evaporation - Colorado	0
159		Non-Federal Reservoir Evaporation - Nebraska	0
160	Rock Subbasin	Non-Federal Reservoir Evaporation - Nebraska	0
161	South Fork Subbasin	Non-Federal Reservoir Evaporation - Colorado	0
162		Non-Federal Reservoir Evaporation - Kansas	0
163		Non-Federal Reservoir Evaporation - Nebraska	0
164	Frenchman Subbasin	Non-Federal Reservoir Evaporation - Nebraska	0
165	Driftwood Subbasin	Non-Federal Reservoir Evaporation - Kansas	0
166		Non-Federal Reservoir Evaporation - Nebraska	0
167	Red Willow Subbasin	Non-Federal Reservoir Evaporation - Nebraska	0
168	Medicine Creek Sub	Non-Federal Reservoir Evaporation - Nebraska	0
169		Non-Federal Reservoir Evaporation - Nebraska - Below Gage	0
170	Beaver Subbasin	Non-Federal Reservoir Evaporation - Colorado	0
171		Non-Federal Reservoir Evaporation - Kansas	0
172		Non-Federal Reservoir Evaporation - Nebraska	0
173		Non-Federal Reservoir Evaporation - Nebraska - Below Gage	0
174	Sappa Subbasin	Non-Federal Reservoir Evaporation - Kansas	0
175		Non-Federal Reservoir Evaporation - Nebraska	0
176		Non-Federal Reservoir Evaporation - Nebraska - Below Gage	0

	A	B	C
1	Calendar Year		2003
2			
177	Prairie Dog Subbasin	Non-Federal Reservoir Evaporation - Kansas	0
178		Non-Federal Reservoir Evaporation - Nebraska	0
179	Mainstem Subbasin	Non-Federal Reservoir Evaporation - Kansas	0
180		Non-Federal Reservoir Evaporation - Nebraska - Below Gage	0
181			
182	Stream Gage Data		
183	North Fork Subbasin	North Fork Republican River At Colorado-Nebraska State Line	17,700
184	Arikaree Subbasin	Arikaree River At Haigler	1,060
185	Buffalo Subbasin	Buffalo Creek Near Haigler	2,090
186	Rock Subbasin	Rock Creek At Parks	4,710
187	South Fork Subbasin	South Fork Republican River Near Benkelman	905
188	Frenchman Subbasin	Frenchman Creek At Culbertson	13,360
189	Driftwood Subbasin	Driftwood Creek Near McCook	1,100
190	Red Willow Subbasin	Red Willow Creek Near Red Willow	3,970
191	Medicine Creek Sub	Medicine Creek Below Harry Strunk	19,850
192	Beaver Subbasin	Beaver Creek Near Beaver City	220
193	Sappa Subbasin	Sappa Creek Near Stamford	179
194	Prairie Dog Subbasin	Prairie Dog Creek Near Woodruff	1,087
195	Mainstem Subbasin	Republican River At Guide Rock	21,346
196		Republican River Near Hardy	52,394
197		White Rock Creek Above Lovewell	20,959
198			
199	Flood Flow Data		
200	North Fork Subbasin	North Fork Flood Flow	0
201	Arikaree Subbasin	Arikaree Flood Flow	0
202	Buffalo Subbasin	Buffalo Flood Flow	0
203	Rock Subbasin	Rock Flood Flow	0
204	South Fork Subbasin	Southfork Flood Flow	0
205	Frenchman Subbasin	Frenchman Flood Flow	0
206	Driftwood Subbasin	Driftwood Flood Flow	0
207	Red Willow Subbasin	Red Willow Flood Flow	0
208	Medicine Creek Sub	Medicine Creek Flood Flow	0
209	Beaver Subbasin	Beaver Flood Flow	0
210	Sappa Subbasin	Sappa Flood Flow	0
211	Prairie Dog Subbasin	Prairie Dog Flood Flow	0
212	Mainstem Subbasin	Mainstem Flood Flow	0
213			
214	Reservoir Data		
215	South Fork Subbasin	Bonny Reservoir Evaporation	3,375
216		Bonny Reservoir Change In Storage	-2,226
217	Frenchman Subbasin	Enders Reservoir Evaporation	1,485
218		Enders Reservoir Change In Storage	-218
219	Red Willow Subbasin	Hugh Butler Lake Evaporation	2,377
220		Hugh Butler Lake Change In Storage	2,947
221	Medicine Creek Sub	Harry Strunk Lake Evaporation	3,755
222		Harry Strunk Lake Change In Storage	3,385
223	Prairie Dog Subbasin	Keith Sebelius Lake Evaporation	2,823
224		Keith Sebelius Lake Change In Storage	-4,338
225	Mainstem Subbasin	Swanson Lake Evaporation	6,086
226		Swanson Lake Change In Storage	4,735
227		Harlan County Evaporation	23,664
228		Harlan County Change In Storage	-47,110
229		Lovewell Reservoir Ev charged to the Republican River	670
230			
231	Canal Data		
232	North Fork Subbasin	Haigler Canal Diversions - Colorado	1,948
233		Haigler Canal Diversions - Nebraska	4,965
234		Haigler Canal Diversions	6,913
235	South Fork Subbasin	Hale Ditch Diversions	0
236	Frenchman Subbasin	Champion Canal Diversions	0
237		Riverside Canal Diversions	1,838
238		Culbertson Canal Diversions	8,002
239		Culbertson Canal Extension Diversions	0
240		Culbertson Canal % Return Flow	0.56
241		Culbertson Canal Extension % Return Flow	1.00
242	Driftwood Subbasin	Meeker-Driftwood Canal Diversions	0
243		Meeker-Driftwood Canal % Return Flow	1.00
244	Red Willow Subbasin	Red Willow Canal Diversions	0
245		Red Willow Canal % Return Flow	1.00
246	Prairie Dog Subbasin	Almena Canal Diversions	3,379
247		Almena Canal % Return Flow	0.52
248	Mainstem Subbasin	Bartley Canal Diversion	0
249		Bartley Canal % Return Flow	1.00
250		Cambridge Canal Diversion	18,332
251		Cambridge Canal % Return Flow	0.51
252		Naponee Canal Diversion	2,162
253		Naponee Canal % Return Flow	0.53
254		Franklin Canal Diversion	15,262
255		Franklin Canal % Return Flow	0.64
256		Franklin Pump Canal Diversions	1,687
257		Franklin Pump Canal % Return Flow	0.57
258		Superior Canal Diversions	8,174
259		Superior Canal % Return Flow	0.57
260			
261		Courtland Canal Diversions At Headgate	66,500
262		Diversions to Nebraska Courtland	1,591
263		Nebraska Courtland % Return Flow	0.33

	A	B	C
1	Calendar Year		2003
2			
264		Courtland Canal, Loss in NE assigned to upper Courtland KS	2,841
265		Courtland Canal, Loss in NE assigned to delivery to Lovewell	10,116
266		Courtland Canal At Kansas-Nebraska State Line	51,952
267		Courtland Canal Diversions to the Upper Courtland District	17,511
268		Courtland Canal Above Lovewell % Return Flow	0.52
269		Courtland Canal, Loss assigned to deliveries of water to Lovewell, Stateline to L	10,687
270		Courtland Canal Deliveries To Lovewell Reservoir	26,596
271		Diversions of Republican River water from Lovewell Reservoir to the Courtland	21,270
272		Courtland Canal Below Lovewell % Return Flow	0.46
273			
274		To allocate Harlan County evaporation:	
275		Kansas Bostwick Diversions During Irrigation Season	27,100
276		Nebraska Bostwick Diversions During Irrigation Season	28,844

	A	B
1	North Fork Republican River Sub-Basin	2003
2		
3	Input Data	
4	Groundwater / Model Data	
5	Imported Water Nebraska	0
6	GW CBCU Colorado	14023
7	GW CBCU Kansas	17
8	GW CBCU Nebraska	1402
9		
10	Surface Water Data	
11	North Fork Republican River At Colorado-Nebraska State Line	17700
12	Haigler Canal Diversions - Colorado	1948
13	SW Diversions - Irrigation -Non-Federal Canals- Colorado	2410
14	SW Diversions - Irrigation - Small Pumps - Colorado	0
15	SW Diversions - M&I - Colorado	0
16	Haigler Canal Diversions - Nebraska	4965
17	Non-Federal Reservoir Evaporation - Colorado	0
18	North Fork Flood Flow	0
19		
20	Consumptive Use Calculations	
21	Colorado	
22	Haigler Canal CBCU	1168.8
23	SW CBCU - Irrigation - Non Federal Canals	1446
24	SW CBCU - Irrigation - Small Pumps	0
25	SW CBCU - M&I	0
26	Non-Federal Reservoir Evaporation	0
27	SW CBCU	2615
28	GW CBCU	14023
29	Total CBCU	16640
30		
31	Kansas	
32	GW CBCU	17
33	Total CBCU	20
34		
35	Nebraska	
36	Haigler Canal CBCU	2979
37	SW CBCU	2979
38	GW CBCU	1402
39	Total CBCU	4380
40		
41	Totals	
42	Total SW CBCU	5594
43	Total GW CBCU	15442
44	Total Basin CBCU	21036
45		
46	Virgin Water Supply	
47	North Fork Republican River At Colorado-Nebraska State Line	17700
48	Nebraska Haigler Canal Return Flow To Main Stem	1986
49	Colorado CBCU	16640
50	Kansas CBCU	20
51	Nebraska CBCU	4380
52	Imported Water	0
53	Virgin Water Supply	40730
54	Adjustment For Flood Flows	0
55	Computed Water Supply	40730
56		
57	Allocations	
58	Colorado Percent Of Allocation	22.4%
59	Colorado Allocation	9120
60	Kansas Percent Of Allocation	0.0%
61	Kansas Allocation	0
62	Nebraska Percent Of Allocation	24.6%
63	Nebraska Allocation	10020
64	Total Basin Allocation	19140
65	Percent Of Supply Not Allocated	53.0%
66	Quantity Of Unallocated Supply	21590

	A	B
1	Arikaree River Sub-Basin	2003
2		
3	Input Data	
4	Groundwater / Model Data	
5	Imported Water Nebraska	0
6	GW CBCU Colorado	242
7	GW CBCU Kansas	100
8	GW CBCU Nebraska	508
9		
10	Surface Water Data	
11	Arikaree River At Haigler	1060
12	SW Diversions - Irrigation -Non-Federal Canals- Colorado	0
13	SW Diversions - Irrigation - Small Pumps - Colorado	0
14	SW Diversions - M&I - Colorado	0
15	SW Diversions - Irrigation - Non-Federal Canals- Kansas	0
16	SW Diversions - Irrigation - Small Pumps - Kansas	0
17	SW Diversions - M&I - Kansas	0
18	SW Diversions - Irrigation - Non-Federal Canals - Nebraska	0
19	SW Diversions - Irrigation - Small Pumps - Nebraska	0
20	SW Diversions - M&I - Nebraska	0
21	Non-Federal Reservoir Evaporation - Colorado	0
22	Non-Federal Reservoir Evaporation - Kansas	0
23	Non-Federal Reservoir Evaporation - Nebraska	0
24	Arikaree Flood Flow	0
25		
26	Consumptive Use Calculations	
27	Colorado	
28	SW CBCU - Irrigation - Non Federal Canals	0
29	SW CBCU - Irrigation - Small Pumps	0
30	SW CBCU - M&I	0
31	Non-Federal Reservoir Evaporation	0
32	SW CBCU	0
33	GW CBCU	242
34	Total CBCU	240
35		
36	Kansas	
37	SW CBCU - Irrigation - Non Federal Canals	0
38	SW CBCU - Irrigation - Small Pumps	0
39	SW CBCU - M&I	0
40	Non-Federal Reservoir Evaporation	0
41	SW CBCU	0
42	GW CBCU	100
43	Total CBCU	100
44		
45	Nebraska	
46	SW CBCU - Irrigation - Non Federal Canals	0
47	SW CBCU - Irrigation - Small Pumps	0
48	SW CBCU - M&I	0
49	Non-Federal Reservoir Evaporation	0
50	SW CBCU	0
51	GW CBCU	508
52	Total CBCU	510
53		
54	Totals	
55	Total SW CBCU	0
56	Total GW CBCU	850
57	Total Basin CBCU	850
58		
59	Virgin Water Supply	
60	Arikaree River At Haigler	1060
61	Colorado CBCU	240
62	Kansas CBCU	100
63	Nebraska CBCU	510
64	Imported Water	0
65	Virgin Water Supply	1910
66	Adjustment For Flood Flows	0
67	Computed Water Supply	1910
68		
69	Allocations	
70	Colorado Percent Of Allocation	78.5%
71	Colorado Allocation	1500
72	Kansas Percent Of Allocation	5.1%
73	Kansas Allocation	100
74	Nebraska Percent Of Allocation	16.8%
75	Nebraska Allocation	320
76	Total Basin Allocation	1920
77	Percent Of Supply Not Allocated	-0.4%
78	Quantity Of Unallocated Supply	-10

	A	B
1	Buffalo Creek Sub-Basin	2003
2		
3	Input Data	
4	Groundwater / Model Data	
5	Imported Water Nebraska	0
6	GW CBCU Colorado	265
7	GW CBCU Kansas	0
8	GW CBCU Nebraska	3338
9		
10	Surface Water Data	
11	Buffalo Creek Near Haigler	2090
12	SW Diversions - Irrigation -Non-Federal Canals- Colorado	0
13	SW Diversions - Irrigation - Small Pumps - Colorado	0
14	SW Diversions - M&I - Colorado	0
15	SW Diversions - Irrigation - Non-Federal Canals - Nebraska	587
16	SW Diversions - Irrigation - Small Pumps - Nebraska	70.2
17	SW Diversions - M&I - Nebraska	0
18	Non-Federal Reservoir Evaporation - Colorado	0
19	Non-Federal Reservoir Evaporation - Nebraska	0
20	Buffalo Flood Flow	0
21		
22	Consumptive Use Calculations	
23	Colorado	
24	SW Diversions - Irrigation -Non-Federal Canals- Colorado	0
25	SW Diversions - Irrigation - Small Pumps - Colorado	0
26	SW Diversions - M&I - Colorado	0
27	Non-Federal Reservoir Evaporation - Colorado	0
28	SW CBCU	0
29	GW CBCU	265
30	Total CBCU	270
31		
32	Kansas	
33	GW CBCU	0
34	Total CBCU	0
35		
36	Nebraska	
37	SW CBCU - Irrigation - Non Federal Canals	352.2
38	SW CBCU - Irrigation - Small Pumps	53
39	SW CBCU - M&I	0
40	Non-Federal Reservoir Evaporation	0
41	SW CBCU	405
42	GW CBCU	3338
43	Total CBCU	3740
44		
45	Totals	
46	Total SW CBCU	405
47	Total GW CBCU	3603
48	Total Basin CBCU	4010
49		
50	Virgin Water Supply	
51	Buffalo Creek Near Haigler	2090
52	Colorado CBCU	270
53	Kansas CBCU	0
54	Nebraska CBCU	3740
55	Imported Water	0
56	Virgin Water Supply	6100
57	Adjustment For Flood Flows	0
58	Computed Water Supply	6100
59		
60	Allocations	
61	Colorado Percent Of Allocation	0.0%
62	Colorado Allocation	0
63	Kansas Percent Of Allocation	0.0%
64	Kansas Allocation	0
65	Nebraska Percent Of Allocation	33.0%
66	Nebraska Allocation	2010
67	Total Basin Allocation	2010
68	Percent Of Supply Not Allocated	67.0%
69	Quantity Of Unallocated Supply	4090

	A	B
1	Rock Creek Sub-Basin	2003
2		
3	Input Data	
4	Groundwater / Model Data	
5	Imported Water Nebraska	0
6	GW CBCU Colorado	59
7	GW CBCU Kansas	0
8	GW CBCU Nebraska	3419
9		
10	Surface Water Data	
11	Rock Creek At Parks	4710
12	SW Diversions - Irrigation - Non-Federal Canals - Nebraska	0
13	SW Diversions - Irrigation - Small Pumps - Nebraska	0
14	SW Diversions - M&I - Nebraska	0
15	Non-Federal Reservoir Evaporation - Nebraska	0
16	Rock Flood Flow	0
17		
18	Consumptive Use Calculations	
19	Colorado	
20	GW CBCU	59
21	Total CBCU	60
22		
23	Kansas	
24	GW CBCU	0
25	Total CBCU	0
26		
27	Nebraska	
28	SW Diversions - Irrigation - Non-Federal Canals - Nebraska	0
29	SW CBCU - Irrigation - Small Pumps	0
30	SW CBCU - M&I	0
31	Non-Federal Reservoir Evaporation	0
32	SW CBCU	0
33	GW CBCU	3419
34	Total CBCU	3420
35		
36	Totals	
37	Total SW CBCU	0
38	Total GW CBCU	3478
39	Total Basin CBCU	3480
40		
41	Virgin Water Supply	
42	Rock Creek At Parks	4710
43	Colorado CBCU	60
44	Kansas CBCU	0
45	Nebraska CBCU	3420
46	Imported Water	0
47	Virgin Water Supply	8190
48	Adjustment For Flood Flows	0
49	Computed Water Supply	8190
50		
51	Allocations	
52	Colorado Percent Of Allocation	0.0%
53	Colorado Allocation	0
54	Kansas Percent Of Allocation	0.0%
55	Kansas Allocation	0
56	Nebraska Percent Of Allocation	40.0%
57	Nebraska Allocation	3280
58	Total Basin Allocation	3280
59	Percent Of Supply Not Allocated	60.0%
60	Quantity Of Unallocated Supply	4910

	A	B
1	South Fork Republican River Sub-Basin	2003
2		
3	Input Data	
4	Groundwater / Model Data	
5	Imported Water Nebraska	0
6	GW CBCU Colorado	12115
7	GW CBCU Kansas	5351
8	GW CBCU Nebraska	1347
9		
10	Surface Water Data	
11	South Fork Republican River Near Benkelman	905
12	Bonny Reservoir Evaporation	3375
13	Bonny Reservoir Change In Storage	-2226
14	Hale Ditch Diversions	0
15	SW Diversions - Irrigation -Non-Federal Canals- Colorado	996
16	SW Diversions - Irrigation - Small Pumps - Colorado	0
17	SW Diversions - M&I - Colorado	0
18	SW Diversions - Irrigation - Non-Federal Canals- Kansas	0
19	SW Diversions - Irrigation - Small Pumps - Kansas	39
20	SW Diversions - M&I - Kansas	0
21	SW Diversions - Irrigation - Non-Federal Canals - Nebraska	0
22	SW Diversions - Irrigation - Small Pumps - Nebraska	0
23	SW Diversions - M&I - Nebraska	0
24	Non-Federal Reservoir Evaporation - Colorado	0
25	Non-Federal Reservoir Evaporation - Kansas	0
26	Non-Federal Reservoir Evaporation - Nebraska	0
27	Southfork Flood Flow	0
28		
29	Consumptive Use Calculations	
30	Colorado	
31	Hale Ditch CBCU	0
32	SW CBCU - Irrigation - Non Federal Canals	597.6
33	SW CBCU - Irrigation - Small Pumps	0
34	SW CBCU - M&I	0
35	Non-Federal Reservoir Evaporation	0
36	Bonny Reservoir Evaporation	3375
37	SW CBCU	3973
38	GW CBCU	12115
39	Total CBCU	16090
40		
41	Kansas	
42	SW CBCU - Irrigation - Non Federal Canals	0
43	SW CBCU - Irrigation - Small Pumps	29.25
44	SW CBCU - M&I	0
45	Non-Federal Reservoir Evaporation	0
46	SW CBCU	29
47	GW CBCU	5351
48	Total CBCU	5380
49		
50	Nebraska	
51	SW CBCU - Irrigation - Non Federal Canals	0
52	SW CBCU - Irrigation - Small Pumps	0
53	SW CBCU - M&I	0
54	Non-Federal Reservoir Evaporation	0
55	SW CBCU	0
56	GW CBCU	1347
57	Total CBCU	1350
58		
59	Totals	
60	Total SW CBCU	4002
61	Total GW CBCU	18813
62	Total Basin CBCU	22810
63		
64	Virgin Water Supply	
65	South Fork Republican River Near Benkelman	905
66	Colorado CBCU	16090
67	Kansas CBCU	5380
68	Nebraska CBCU	1350
69	Bonny Reservoir Change In Storage	-2226
70	Imported Water	0
71	Virgin Water Supply	21500
72	Adjustment For Flood Flows	0
73	Computed Water Supply	23730
74		
75	Allocations	
76	Colorado Percent Of Allocation	44.4%
77	Colorado Allocation	10540
78	Kansas Percent Of Allocation	40.2%
79	Kansas Allocation	9540
80	Nebraska Percent Of Allocation	1.4%
81	Nebraska Allocation	330
82	Total Basin Allocation	20410
83	Percent Of Supply Not Allocated	14.0%
84	Quantity Of Unallocated Supply	3320

	A	B
1	Frenchman Creek Sub-Basin	2003
2		
3	Input Data	
4	Groundwater / Model Data	
5	Imported Water Nebraska	0
6	GW CBCU Colorado	37
7	GW CBCU Kansas	0
8	GW CBCU Nebraska	85647
9		
10	Surface Water Constants	
11	Culbertson Canal % Return Flow	56%
12	Culbertson Canal Extension % Return Flow	100%
13		
14	Surface Water Data	
15	Frenchman Creek At Culbertson	13360
16	Enders Reservoir Evaporation	1485
17	Enders Reservoir Change In Storage	-218
18	Champion Canal Diversions	0
19	Riverside Canal Diversions	1838
20	Culbertson Canal Diversions	8002
21	Culbertson Canal Extension Diversions	0
22	SW Diversions - Irrigation - Non-Federal Canals - Nebraska	0
23	SW Diversions - Irrigation - Small Pumps - Nebraska	3.09
24	SW Diversions - M&I - Nebraska	0
25	Non-Federal Reservoir Evaporation - Nebraska	0
26	Frenchman Flood Flow	0
27		
28	Consumptive Use Calculations	
29	Colorado	
30	GW CBCU	37
31	Total CBCU	40
32		
33	Kansas	
34	GW CBCU	0
35	Total CBCU	0
36		
37	Nebraska	
38	Champion Canal CBCU	0
39	Riverside Canal CBCU	1102.8
40	Culbertson Canal CBCU	3520.9
41	Culbertson Canal Extension CBCU	0
42	SW CBCU - Irrigation - Non Federal Canals	0
43	SW CBCU - Irrigation - Small Pumps	2
44	SW CBCU - M&I	0
45	Enders Reservoir Evaporation	1485
46	Non-Federal Reservoir Evaporation	0
47	SW CBCU	6111
48	GW CBCU	85647
49	Total CBCU	91760
50		
51	Totals	
52	Total SW CBCU	6111
53	Total GW CBCU	85684
54	Total Basin CBCU	91790
55		
56	Virgin Water Supply	
57	Frenchman Creek At Culbertson	13360
58	17% Culbertson Canal Return Flow to Main Stem	762
59	100% Culbertson Canal Extension Return Flow to Main Stem	0
60	Colorado CBCU	40
61	Kansas CBCU	0
62	Nebraska CBCU	91760
63	Enders Reservoir Change In Storage	-218
64	Imported Water	0
65	Virgin Water Supply	105700
66	Adjustment For Flood Flows	0
67	Computed Water Supply	105920
68		
69	Allocations	
70	Colorado Percent Of Allocation	0.0%
71	Colorado Allocation	0
72	Kansas Percent Of Allocation	0.0%
73	Kansas Allocation	0
74	Nebraska Percent Of Allocation	53.6%
75	Nebraska Allocation	56770
76	Total Basin Allocation	56770
77	Percent Of Supply Not Allocated	46.4%
78	Quantity Of Unallocated Supply	49150

	A	B
1	Driftwood Creek Sub-Basin	2003
2		
3	Input Data	
4	Groundwater / Model Data	
5	Imported Water Nebraska	0
6	GW CBCU Colorado	0
7	GW CBCU Kansas	0
8	GW CBCU Nebraska	1391
9		
10	Surface Water Constants	
11	Meeker-Driftwood Canal % Return Flow	100%
12		
13	Surface Water Data	
14	Driftwood Creek Near McCook	1100
15	SW Diversions - Irrigation - Non-Federal Canals- Kansas	0
16	SW Diversions - Irrigation - Small Pumps - Kansas	0
17	SW Diversions - M&I - Kansas	0
18	Meeker-Driftwood Canal Diversions	0
19	SW Diversions - Irrigation - Non-Federal Canals - Nebraska	0
20	SW Diversions - Irrigation - Small Pumps - Nebraska	0
21	SW Diversions - M&I - Nebraska	0
22	Non-Federal Reservoir Evaporation - Kansas	0
23	Non-Federal Reservoir Evaporation - Nebraska	0
24	Driftwood Flood Flow	0
25		
26	Consumptive Use Calculations	
27	Colorado	
28	GW CBCU	0
29	Total CBCU	0
30		
31	Kansas	
32	SW CBCU - Irrigation - Non Federal Canals	0
33	SW CBCU - Irrigation - Small Pumps	0
34	SW CBCU - M&I	0
35	Non-Federal Reservoir Evaporation	0
36	SW CBCU	0
37	GW CBCU	0
38	Total CBCU	0
39		
40	Nebraska	
41	SW CBCU - Irrigation - Non Federal Canals	0
42	SW CBCU - Irrigation - Small Pumps	0
43	SW CBCU - M&I	0
44	Non-Federal Reservoir Evaporation	0
45	SW CBCU	0
46	GW CBCU	1391
47	Total CBCU	1390
48		
49	Totals	
50	Total SW CBCU	0
51	Total GW CBCU	1391
52	Total Basin CBCU	1390
53		
54	Virgin Water Supply	
55	Driftwood Creek Near McCook	1100
56	24% Meeker Driftwood Canal Return	0
57	Colorado CBCU	0
58	Kansas CBCU	0
59	Nebraska CBCU	1390
60	Imported Water	0
61	Virgin Water Supply	2490
62	Adjustment For Flood Flows	0
63	Computed Water Supply	2490
64		
65	Allocations	
66	Colorado Percent Of Allocation	0.0%
67	Colorado Allocation	0
68	Kansas Percent Of Allocation	6.9%
69	Kansas Allocation	170
70	Nebraska Percent Of Allocation	16.4%
71	Nebraska Allocation	410
72	Total Basin Allocation	580
73	Percent Of Supply Not Allocated	76.7%
74	Quantity Of Unallocated Supply	1910

	A	B
1	Red Willow Creek Sub-Basin	2003
2		
3	Input Data	
4	Groundwater / Model Data	
5	Imported Water Nebraska	20
6	GW CBCU Colorado	0
7	GW CBCU Kansas	0
8	GW CBCU Nebraska	7815
9		
10	Surface Water Constants	
11	Red Willow Canal % Return Flow	100%
12		
13	Surface Water Data	
14	Red Willow Creek Near Red Willow	3970
15	Hugh Butler Lake Evaporation	2377
16	Hugh Butler Lake Change In Storage	2947
17	Red Willow Canal Diversions	0
18	SW Diversions - Irrigation - Non-Federal Canals - Nebraska	0
19	SW Diversions - Irrigation - Small Pumps - Nebraska	341
20	SW Diversions - M&I - Nebraska	0
21	Non-Federal Reservoir Evaporation - Nebraska	0
22	Red Willow Flood Flow	0
23		
24	Consumptive Use Calculations	
25	Colorado	
26	GW CBCU	0
27	Total CBCU	0
28		
29	Kansas	
30	GW CBCU	0
31	Total CBCU	0
32		
33	Nebraska	
34	Red Willow Canal CBCU (10%)	0
35	SW CBCU - Irrigation - Non Federal Canals	0
36	SW CBCU - Irrigation - Small Pumps	256
37	SW CBCU - M&I	0
38	Hugh Butler Lake Evaporation (10%)	238
39	Non-Federal Reservoir Evaporation	0
40	SW CBCU	493
41	GW CBCU	7815
42	Total CBCU	8310
43		
44	Totals	
45	Total SW CBCU	493
46	Total GW CBCU	7815
47	Total Basin CBCU	8310
48		
49	Virgin Water Supply	
50	Red Willow Creek Near Red Willow	3970
51	Red Willow Canal CBCU (90%)	0
52	Colorado CBCU	0
53	Kansas CBCU	0
54	Nebraska CBCU	8310
55	Hugh Butler Lake Change In Storage	2947
56	Hugh Butler Lake Evaporation (90%)	2139.3
57	90% Red Willow Canal Return Flow To Main Stem	0
58	Imported Water	20
59	Virgin Water Supply	17350
60	Adjustment For Flood Flows	0
61	Computed Water Supply	14400
62		
63	Allocations	
64	Colorado Percent Of Allocation	0.0%
65	Colorado Allocation	0
66	Kansas Percent Of Allocation	0.0%
67	Kansas Allocation	0
68	Nebraska Percent Of Allocation	19.2%
69	Nebraska Allocation	2760
70	Total Basin Allocation	2760
71	Percent Of Supply Not Allocated	80.8%
72	Quantity Of Unallocated Supply	11640

	A	B
1	Medicine Creek Sub-Basin	2003
2		
3	Input Data	
4	Groundwater / Model Data	
5	Imported Water Nebraska	9423
6	GW CBCU Colorado	0
7	GW CBCU Kansas	0
8	GW CBCU Nebraska	21139
9		
10	Surface Water Data	
11	Medicine Creek Below Harry Strunk	19850
12	Harry Strunk Lake Evaporation	3755
13	Harry Strunk Lake Change In Storage	3385
14	SW Diversions - Irrigation - Non-Federal Canals - Nebraska	0
15	SW Diversions - Irrigation - Small Pumps - Nebraska	291
16	SW Diversions - M&I - Nebraska	0
17	SW Diversions - Irrigation - Non-Federal Canals - Nebraska -Below Gage	0
18	SW Diversions - Irrigation - Small Pumps -Nebraska - Below Gage	106
19	SW Diversions - M&I - Nebraska - Below Gage	0
20	Non-Federal Reservoir Evaporation - Nebraska	0
21	Non-Federal Reservoir Evaporation - Nebraska - Below Gage	0
22	Medicine Creek Flood Flow	0
23		
24	Consumptive Use Calculations	
25	Colorado	
26	GW CBCU	0
27	Total CBCU	0
28		
29	Kansas	
30	GW CBCU	0
31	Total CBCU	0
32		
33	Nebraska	
34	SW CBCU - Irrigation - Non Federal Canals	0
35	SW CBCU - Irrigation - Small Pumps	218
36	SW CBCU - M&I	0
37	SW CBCU - Irrigation - Non Federal Canals - Below Gage	0
38	SW CBCU - Irrigation - Small Pumps - Below Gage	80
39	SW CBCU - M&I - Below Gage	0
40	Non-Federal Reservoir Evaporation	0
41	Non-Federal Reservoir Evaporation - Below gage	0
42	SW CBCU	298
43	GW CBCU	21139
44	Total CBCU	21440
45		
46	Totals	
47	Total SW CBCU	298
48	Total GW CBCU	21139
49	Total Basin CBCU	21440
50		
51	CBCU Below Gage	
52	SW CBCU Below The Gage	80
53	Total	80
54		
55	Virgin Water Supply	
56	Medicine Creek Below Harry Strunk	19850
57	Colorado CBCU	0
58	Kansas CBCU	0
59	Nebraska CBCU	21440
60	SW CBCU Below The Gage	80
61	Harry Strunk Lake Change In Storage	3385
62	Harry Strunk Lake Evaporation	3755
63	Imported Water	9423
64	Virgin Water Supply	38930
65	Adjustment For Flood Flows	0
66	Computed Water Supply	35550
67		
68	Allocations	
69	Colorado Percent Of Allocation	0.0%
70	Colorado Allocation	0
71	Kansas Percent Of Allocation	0.0%
72	Kansas Allocation	0
73	Nebraska Percent Of Allocation	9.1%
74	Nebraska Allocation	3240
75	Total Basin Allocation	3240
76	Percent Of Supply Not Allocated	90.9%
77	Quantity Of Unallocated Supply	32310

	A	B
1	Beaver Creek Sub-Basin	2003
2		
3	Input Data	
4	Groundwater / Model Data	
5	Imported Water Nebraska	0
6	GW CBCU Colorado	0
7	GW CBCU Kansas	274
8	GW CBCU Nebraska	777
9		
10	Surface Water Data	
11	Beaver Creek Near Beaver City	220
12	SW Diversions - Irrigation - Non-Federal Canals- Colorado	0
13	SW Diversions - Irrigation - Small Pumps - Colorado	0
14	SW Diversions - M&I - Colorado	0
15	SW Diversions - Irrigation - Non-Federal Canals- Kansas	0
16	SW Diversions - Irrigation - Small Pumps - Kansas	26
17	SW Diversions - M&I - Kansas	0
18	SW Diversions - Irrigation - Non-Federal Canals - Nebraska	0
19	SW Diversions - Irrigation - Small Pumps - Nebraska	0
20	SW Diversions - M&I - Nebraska	0
21	SW Diversions - Irrigation - Non-Federal Canals - Nebraska -Below Gage	0
22	SW Diversions - Irrigation - Small Pumps -Nebraska - Below Gage	0
23	SW Diversions - M&I - Nebraska - Below Gage	0
24	Non-Federal Reservoir Evaporation - Colorado	0
25	Non-Federal Reservoir Evaporation - Kansas	0
26	Non-Federal Reservoir Evaporation - Nebraska	0
27	Non-Federal Reservoir Evaporation - Nebraska - Below Gage	0
28	Beaver Flood Flow	0
29		
30	Consumptive Use Calculations	
31	Colorado	
32	SW CBCU - Irrigation - Non Federal Canals	0
33	SW CBCU - Irrigation - Small Pumps	0
34	SW CBCU - M&I	0
35	Non-Federal Reservoir Evaporation	0
36	SW CBCU	0
37	GW CBCU	0
38	Total CBCU	0
39		
40	Kansas	
41	SW CBCU - Irrigation - Non Federal Canals	0
42	SW CBCU - Irrigation - Small Pumps	19.5
43	SW CBCU - M&I	0
44	Non-Federal Reservoir Evaporation	0
45	SW CBCU	20
46	GW CBCU	274
47	Total CBCU	290
48		
49	Nebraska	
50	SW CBCU - Irrigation - Non Federal Canals	0
51	SW CBCU - Irrigation - Small Pumps	0
52	SW CBCU - M&I	0
53	SW CBCU - Irrigation - Non Federal Canals - Below Gage	0
54	SW CBCU - Irrigation - Small Pumps - Below Gage	0
55	SW CBCU - M&I - Below Gage	0
56	Non-Federal Reservoir Evaporation	0
57	Non-Federal Reservoir Evaporation - Below gage	0
58	SW CBCU	0
59	GW CBCU	777
60	Total CBCU	780
61		
62	CBCU Below Gage	
63	SW CBCU Below The Gage	0
64	Total	0
65		
66	Totals	
67	Total SW CBCU	20
68	Total GW CBCU	1051
69	Total Basin CBCU	1070
70		
71	Virgin Water Supply	
72	Beaver Creek Near Beaver City	220
73	Colorado CBCU	0
74	Kansas CBCU	290
75	Nebraska CBCU	780
76	SW CBCU Below The Gage	0
77	Imported Water	0
78	Virgin Water Supply	1290
79	Adjustment For Flood Flows	0
80	Computed Water Supply	1290
81		
82	Allocations	
83	Colorado Percent Of Allocation	20.0%
84	Colorado Allocation	260
85	Kansas Percent Of Allocation	38.8%
86	Kansas Allocation	500
87	Nebraska Percent Of Allocation	40.6%
88	Nebraska Allocation	520
89	Total Basin Allocation	1280

	A	B
1	Beaver Creek Sub-Basin	2003
2		
90	Percent Of Supply Not Allocated	0.6%
91	Quantity Of Unallocated Supply	10

	A	B
1	Sappa Creek Sub-Basin	2003
2		
3	Input Data	
4	Groundwater / Model Data	
5	Imported Water Nebraska	0
6	GW CBCU Colorado	0
7	GW CBCU Kansas	-274
8	GW CBCU Nebraska	500
9		
10	Surface Water Data	
11	Sappa Creek Near Stamford	179.11552
12	Beaver Creek Near Beaver City	220
13	SW Diversions - Irrigation - Non-Federal Canals- Kansas	0
14	SW Diversions - Irrigation - Small Pumps - Kansas	14
15	SW Diversions - M&I - Kansas	0
16	SW Diversions - Irrigation - Non-Federal Canals - Nebraska	0
17	SW Diversions - Irrigation - Small Pumps - Nebraska	0
18	SW Diversions - M&I - Nebraska	0
19	SW Diversions - Irrigation - Non-Federal Canals - Nebraska -Below Gage	0
20	SW Diversions - Irrigation - Small Pumps -Nebraska - Below Gage	19.8
21	SW Diversions - M&I - Nebraska - Below Gage	0
22	Non-Federal Reservoir Evaporation - Kansas	0
23	Non-Federal Reservoir Evaporation - Nebraska	0
24	Non-Federal Reservoir Evaporation - Nebraska - Below Gage	0
25	Sappa Flood Flow	0
26		
27	Consumptive Use Calculations	
28	Colorado	
29	GW CBCU	0
30	Total CBCU	0
31		
32	Kansas	
33	SW CBCU - Irrigation - Non Federal Canals	0
34	SW CBCU - Irrigation - Small Pumps	10.5
35	SW CBCU - M&I	0
36	Non-Federal Reservoir Evaporation	0
37	SW CBCU	11
38	GW CBCU	-274
39	Total CBCU	-260
40		
41	Nebraska	
42		
43	SW CBCU - Irrigation - Non Federal Canals	0
44	SW CBCU - Irrigation - Small Pumps	0
45	SW CBCU - M&I	0
46	SW CBCU - Irrigation - Non Federal Canals - Below Gage	0
47	SW CBCU - Irrigation - Small Pumps - Below Gage	15
48	SW CBCU - M&I - Below Gage	0
49	Non-Federal Reservoir Evaporation	0
50	Non-Federal Reservoir Evaporation - Below gage	0
51	SW CBCU	15
52	GW CBCU	500
53	Total CBCU	510
54		
55	CBCU Below Gage	
56	SW CBCU Below The Gage	15

	A	B
1	Sappa Creek Sub-Basin	2003
2		
57	Total	15
58		
59	Totals	
60	Total SW CBCU	25
61	Total GW CBCU	226
62	Total Basin CBCU	251
63		
64	Virgin Water Supply	
65	Sappa Creek Near Stamford	179
66	Beaver Creek Near Beaver City	220
67	Colorado CBCU	0
68	Kansas CBCU	-260
69	Nebraska CBCU	510
70	SW CBCU Below The Gage	15
71	Imported Water	0
72	Virgin Water Supply	190
73	Adjustment For Flood Flows	0
74	Computed Water Supply	190
75		
76	Allocations	
77	Colorado Percent Of Allocation	0.0%
78	Colorado Allocation	0
79	Kansas Percent Of Allocation	41.1%
80	Kansas Allocation	80
81	Nebraska Percent Of Allocation	41.1%
82	Nebraska Allocation	80
83	Total Basin Allocation	160
84	Percent Of Supply Not Allocated	17.8%
85	Quantity Of Unallocated Supply	30

	A	B
1	Prairie Dog Creek Sub-Basin	2003
2		
3	Input Data	
4	Groundwater / Model Data	
5	Imported Water Nebraska	0
6	GW CBCU Colorado	0
7	GW CBCU Kansas	1679
8	GW CBCU Nebraska	0
9		
10	Surface Water Constants	
11	Almena Canal % Return Flow	52%
12		
13	Surface Water Data	
14	Prairie Dog Creek Near Woodruff	1087.45
15	Keith Sebelius Lake Evaporation	2823
16	Keith Sebelius Lake Change In Storage	-4338
17	Almena Canal Diversions	3379
18	SW Diversions - Irrigation - Non-Federal Canals- Kansas	0
19	SW Diversions - Irrigation - Small Pumps - Kansas	273
20	SW Diversions - M&I - Kansas	548
21	SW Diversions - Irrigation - Non-Federal Canals - Nebraska -Below Gage	0
22	SW Diversions - Irrigation - Small Pumps -Nebraska - Below Gage	59.2
23	SW Diversions - M&I - Nebraska - Below Gage	0
24	Non-Federal Reservoir Evaporation - Kansas	0
25	Non-Federal Reservoir Evaporation - Nebraska	0
26	Prairie Dog Flood Flow	0
27		
28	Consumptive Use Calculations	
29	Colorado	
30	GW CBCU	0
31	Total CBCU	0
32		
33	Kansas	
34	Almena Canal CBCU	1621.92
35	SW CBCU - Irrigation - Non Federal Canals	0
36	SW CBCU - Irrigation - Small Pumps	204.75
37	SW CBCU - M&I	274
38	Keith Sebelius Lake Evaporation	2823
39	Non-Federal Reservoir Evaporation	0
40	SW CBCU	4924
41	GW CBCU	1679
42	Total CBCU	6600
43		
44	Nebraska	
45	SW Diversions - Irrigation - Non-Federal Canals - Nebraska -Below Gage	0
46	SW Diversions - Irrigation - Small Pumps -Nebraska - Below Gage	44.4
47	SW Diversions - M&I - Nebraska - Below Gage	0
48	Non-Federal Reservoir Evaporation	0
49	SW CBCU	44
50	GW CBCU	0
51	Total CBCU	40

	A	B
1	Prairie Dog Creek Sub-Basin	2003
2		
52		
53	CBCU Below Gage	
54	SW CBCU Below The Gage	44
55	Total	44
56		
57	Totals	
58	Total SW CBCU	4968
59	Total GW CBCU	1679
60	Total Basin CBCU	6647
61		
62	Virgin Water Supply	
63	Prairie Dog Creek Near Woodruff	1087
64	Colorado CBCU	0
65	Kansas CBCU	6600
66	Nebraska CBCU	40
67	SW CBCU Below The Gage	44
68	Keith Sebelius Lake Change In Storage	-4338
69	Imported Water	0
70	Virgin Water Supply	3350
71	Adjustment For Flood Flows	0
72	Computed Water Supply	7690
73		
74	Allocations	
75	Colorado Percent Of Allocation	0.0%
76	Colorado Allocation	0
77	Kansas Percent Of Allocation	45.7%
78	Kansas Allocation	3510
79	Nebraska Percent Of Allocation	7.6%
80	Nebraska Allocation	580
81	Total Basin Allocation	4090
82	Percent Of Supply Not Allocated	46.7%
83	Quantity Of Unallocated Supply	3600

	A	B	C
1	Mainstem Sub-Basin	2003	
2			
3	Input Data		
4	Groundwater / Model Data		
5	Imported Water Nebraska Above Guide Rock	337	
6	GW CBCU Colorado	132	
7	GW CBCU Kansas	110	
8	GW CBCU Nebraska Above Guide Rock	74323	
9	GW CBCU Nebraska Below Guide Rock	2559	
10	GW CBCU Nebraska	76882	
11			
12	Surface Water Constants		
13	Meeker-Driftwood Canal % Return Flow	100%	
14	Culbertson Canal % Return Flow	56%	
15	Culbertson Canal Extension % Return Flow	100%	
16	Red Willow Canal % Return Flow	100%	
17	Bartley Canal % Return Flow	100%	
18	Cambridge Canal % Return Flow	51%	
19	Naponee Canal % Return Flow	53%	
20	Franklin Canal % Return Flow	64%	
21	Franklin Pump Canal % Return Flow	57%	
22	Superior Canal % Return Flow	57%	
23	Nebraska Courtland % Return Flow	33%	
24	Courtland Canal Above Lovewell % Return Flow	52%	
25	Courtland Canal Below Lovewell % Return Flow	46%	
26			
27	Surface Water Data		
28	Surface Water Gages		
29	Republican River Near Hardy	52394	
30	North Fork Republican River At Colorado-Nebraska State Line	17700	
31	Arikaree River At Haigler	1060	
32	Buffalo Creek Near Haigler	2090	
33	Rock Creek At Parks	4710	
34	South Fork Republican River Near Benkelman	905	
35	Frenchman Creek At Culbertson	13360	
36	Driftwood Creek Near McCook	1100	
37	Red Willow Creek Near Red Willow	3970	
38	Medicine Creek Below Harry Strunk	19850	
39	Sappa Creek Near Stamford	179	
40	Prairie Dog Creek Near Woodruff	1087	
41	White Rock Creek Above Lovewell	20959	
42	Reservoir Data		
43	Swanson Lake Evaporation	6086	
44	Swanson Lake Change In Storage	4735	
45	Hugh Butler Lake Evaporation	2377	
46	Harry Strunk Lake Evaporation	3755	
47	Harlan County Evaporation	23664	
48	Harlan County Change In Storage	-47110	
49	Lovewell Reservoir Ev charged to the Republican River	670	
50	Canal Diversion Data		
51	Bartley Canal Diversion	0	
52	Cambridge Canal Diversion	18332	
53	Naponee Canal Diversion	2162	
54	Franklin Canal Diversion	15262	
55	Franklin Pump Canal Diversions	1687	
56	Superior Canal Diversions	8174	
57			
58	Courtland Canal Diversions At Headgate	66500	
59	Diversions to Nebraska Courtland	1591	
60	Courtland Canal, Loss in NE assigned to upper Courtland KS	2841	Included in attachme
61	Courtland Canal, Loss in NE assigned to delivery to Lovewell	10116	
62	Courtland Canal At Kansas-Nebraska State Line	51952	
63	Courtland Canal Diversions to the Upper Courtland District	17511	
64	Courtland Canal, Loss assigned to deliveries of water to Lovewell, Stateline to Lovewell	10687	
65	Courtland Canal Deliveries To Lovewell Reservoir	26596	
66	Diversions of Republican River water from Lovewell Reservoir to the Courtland Canal below Lovewell	21270	
67			
68	Kansas Bostwick Diversions During Irrigation Season	27100	
69	Nebraska Bostwick Diversions During Irrigation Season	28844	
70			
71	Meeker-Driftwood Canal Diversions	0	

	A	B	C
1	Mainstem Sub-Basin	2003	
2			
72	Red Willow Canal Diversions	0	
73	Culbertson Canal Diversions	8002	
74	Culbertson Canal Extension Diversions	0	
75	Haigler Canal Diversions - Nebraska	4965	
76	Kansas Surface Water Data		
77	SW Diversions - Irrigation - Non-Federal Canals- Kansas	0	
78	SW Diversions - Irrigation - Small Pumps - Kansas	1064	
79	SW Diversions - M&I - Kansas	0	
80	Non-Federal Reservoir Evaporation - Kansas	0	
81	Nebraska Surface Water Data		
82	SW Diversions - Irrigation - Non-Federal Canals - Nebraska - Mainstem	3719	
83	SW Diversions - Irrigation - Small Pumps - Nebraska - Mainstem	1401	
84	SW Diversions - M&I - Nebraska - Mainstem	0	
85	Non-Federal Reservoir Evaporation - Nebraska - Below Gage	0	
86	Mainstem Flood Flow	0	
87			
88	Calculations		
89	Return Flow From Courtland Canal To Republican River Above Hardy From Kansas	779	
90	Courtland Canal Transportation Loss in NE assigned to the Upper Courtland KS that does not recharge	511	
91	Courtland Canal Transportation Loss in NE assigned to deliveries to Lovewell that does not recharge	1821	
92	Courtland Canal Transportation Loss from the Stateline to Lovewell that does not return	1924	
93	Net Evaporation From Lovewell Reservoir Charged To Republican River	375	
94	Percent Kansas Bostwick Diversions During Irrigation Season	48.44%	
95	Percent Nebraska Diversions During Irrigation Season	51.56%	
96	Net Evaporation From Harlan County Reservoir Charged To Kansas	11463	
97	Net Evaporation From Harlan County Reservoir Charged To Nebraska	12201	
98			
99	Consumptive Use Calculations		
100	Colorado		
101	GW Depletion	132	
102	Total CU	130	
103			
104	Kansas		
105	Net Evaporation From Harlan County Reservoir Charged To Kansas	11463	
106	Courtland Canal Transportation Loss in NE assigned to deliveries to Lovewell that does not recharge	1821	
107	Courtland Canal Above Lovewell CBCU	8440	
108	Courtland Canal Transportation Loss from the Stateline to Lovewell that does not return	1924	
109	Net Evaporation From Lovewell Charged To Kansas	670	
110	Courtland Canal Below Lovewell CBCU	11557	
111	SW CBCU - Irrigation - Non Federal Canals	0	
112	SW CBCU - Irrigation - Small Pumps	798	
113	SW CBCU - M&I	0	
114	Non-Federal Reservoir Evaporation - Kansas	0	
115	SW CBCU	36673	
116	GW CBCU	110	
117	Total CBCU	36780	
118			
119	Nebraska		
120	NE Courtland Canal CBCU (includes transportation loss)	1072	
121	Superior Canal CBCU	3515	
122	Franklin Pump Canal CBCU	725	
123	Franklin Canal CBCU	5494	
124	Naponee Canal CBCU	1016	
125	Cambridge Canal Diversion	8983	
126	Bartley Canal Diversion	0	
127	Meeker-Driftwood Canal CBCU	0	
128	Red Willow Canal Diversions (90%)	0	
129	SW CBCU - Irrigation - Non Federal Canals	2231	
130	SW CBCU - Irrigation - Small Pumps	1051	
131	SW CBCU - M&I	0	
132	Harry Strunk Lake Evaporation	3755	
133	Swanson Lake Evaporation	6086	
134	Hugh Butler Lake Evaporation (90%)	2139	
135	Harlan County Evaporation Charged To Nebraska	12201	
136	Non-Federal Reservoir Evaporation	0	
137	SW CBCU	48269	
138	GW CBCU	76882	
139	Total CBCU	125150	

	A	B	C
1	Mainstem Sub-Basin	2003	
2			
140			
141	Totals		
142	Total SW CBCU	84942	
143	Total GW CBCU	77124	
144	Total Basin CBCU	162070	
145			
146	Virgin Water Supply		
147	Republican River Near Hardy	52394	
148	North Fork Republican River At Colorado-Nebraska State Line	17700	
149	Arikaree River At Haigler	1060	
150	Buffalo Creek Near Haigler	2090	
151	Rock Creek At Parks	4710	
152	South Fork Republican River Near Benkelman	905	
153	Frenchman Creek At Culbertson	13360	
154	Driftwood Creek Near McCook	1100	
155	Red Willow Creek Near Red Willow	3970	
156	Medicine Creek Below Harry Strunk	19850	
157	Sappa Creek Near Stamford	179	
158	Prairie Dog Creek Near Woodruff	1087	
159			
160	Colorado CBCU	130	
161	Kansas CBCU Above Stateline	14593	
162	Nebraska CBCU	125150	
163			
164	90% Red Willow Canal CBCU - Nebraska	0	
165	90% Hugh Butler Lake Evap	2139	
166	Harry Strunk Lake Evaporation	3755	
167			
168	CBCU Below Medicine Creek Gage	80	
169	CBCU Below Beaver Creek Gage	0	
170	CBCU Below Sappa Creek Gage	15	
171	CBCU Below Prairie Dog Gage	44	
172			
173	Harlan County Change In Storage	-47110	
174	Swanson Lake Change In Storage	4735	
175			
176	Haigler Canal Return Flow To Mainstem	1986	
177	Culbertson Canal Return Flow To Mainstem	762	
178	Culbertson Canal Extension Return Flow To Mainstem	0	
179	Meeker - Driftwood Canal Return Flow To Driftwood Creek	0	
180	Red Willow Canal Return Flow To Mainstem	0	
181			
182	Courtland Canal At Kansas-Nebraska State Line	51952	
183	Return Flow To Republican River Above Hardy From Kansas	779.28	
184			
185	Imported Water	337	
186	Virgin Water Supply	126213	
187	Adjustment For Flood Flows	0	
188	Computed Water Supply	168590	
189			
190	Allocations		
191	Colorado Percent Of Allocation	0	
192	Colorado Allocation	0	
193	Kansas Percent Of Allocation	51.1%	
194	Kansas Allocation	86150	
195	Nebraska Percent Of Allocation	48.9%	
196	Nebraska Allocation	82440	
197	Total Basin Allocation	168590	
198	Percent Of Supply Not Allocated	0.0%	
199	Quantity Of Unallocated Supply	0	

Table 1: Annual Virgin and Computed Water Supply, Allocations, and Computed Beneficial Consumptive Uses by State, Main Stem, and Sub-Basin

2003 Basin	Virgin Water Supply	Computed Water Supply	Allocations				Computed Beneficial Consumptive Use		
			Colorado	Kansas	Nebraska	Unallocated	Colorado	Kansas	Nebraska
North Fork	40,730	40,730	9,120	0	10,020	21,590	16,640	20	4,380
Arikaree	1,910	1,910	1,500	100	320	-10	240	100	510
Buffalo	6,100	6,100	0	0	2,010	4,090	270	0	3,740
Rock	8,190	8,190	0	0	3,280	4,910	60	0	3,420
South Fork	21,500	23,730	10,540	9,540	330	3,320	16,090	5,380	1,350
Frenchman	105,700	105,920	0	0	56,770	49,150	40	0	91,760
Driftwood	2,490	2,490	0	170	410	1,910	0	0	1,390
Red Willow	17,350	14,400	0	0	2,760	11,640	0	0	8,310
Medicine	38,930	35,550	0	0	3,240	32,310	0	0	21,440
Beaver	1,290	1,290	260	500	520	10	0	290	780
Sappa	190	190	0	80	80	30	0	-260	510
Prairie Dog	3,350	7,690	0	3,510	580	3,600	0	6,600	40
Main Stem	126,210	168,590	0	86,150	82,440	0	130	36,780	125,150
Total All Basins	373,940	416,780	21,420	100,050	162,760	132,550	33,470	48,910	262,780
Main Stem Including Unallocated		301,140	0	153,880	147,260				
Total	373,940	416,780	21,420	167,780	227,580	0	33,470	48,910	262,780

Table 2: Original Compact Virgin Water Supply and Allocations

Basin	Virgin Water Supply	Colorado Allocation	% of Basin Supply	Kansas Allocation	% of Basin Supply	Nebraska Allocation	% of Basin Supply	Unallocated	% of Basin Supply
North Fork	44,700	10,000	22.4%			11,000	24.6%	23,700	53.0%
Arikaree	19,610	15,400	78.5%	1,000	5.1%	3,300	16.8%	-90	-0.4%
Buffalo	7,890					2,600	33.0%	5,290	67.0%
Rock	11,000					4,400	40.0%	6,600	60.0%
South Fork	57,200	25,400	44.4%	23,000	40.2%	800	1.4%	8,000	14.0%
Frenchman	98,500					52,800	53.6%	45,700	46.4%
Driftwood	7,300			500	6.9%	1,200	16.4%	5,600	76.7%
Red Willow	21,900					4,200	19.2%	17,700	80.8%
Medicine	50,800					4,600	9.1%	46,200	90.9%
Beaver	16,500	3,300	20.0%	6,400	38.8%	6,700	40.6%	100	0.6%
Sappa	21,400			8,800	41.1%	8,800	41.1%	3,800	17.8%
Prairie Dog	27,600			12,600	45.7%	2,100	7.6%	12,900	46.7%
Tributaries Sub-Total	384,000							175,500	
Main Stem	94,500								
Main Stem + Unallocated	270,000			138,000	51.1%	132,000	48.9%		
Total	478,900	54,100		190,300		234,500			

Table 3A: Colorado's Five-Year Average Allocation and CBCU

Year	Allocation	Computed Beneficial Consumptive Use	Imported Water Supply Credit	Allocation - (CBCU - IWS Credit)
2003	21,420	33,470	NA	-12,050
2004			NA	
2005			NA	
2006			NA	
2007			NA	
Average	21,420	33,470		-12,050

Table 3B: Kansas's Five-Year Average Allocation and CBCU

Year	Allocation	Computed Beneficial Consumptive Use	Imported Water Supply Credit	Allocation - (CBCU - IWS Credit)
2003	167,780	48,910	NA	118,870
2004			NA	
2005			NA	
2006			NA	
2007			NA	
Average	167,780	48,910		118,870

Table 3C: Nebraska's Five-Year Average Allocation and CBCU

Year	Allocation	Computed Beneficial Consumptive Use	Imported Water Supply Credit	Allocation - (CBCU - IWS Credit)
2003	227,580	262,780	9,780	-25,420
2004				
2005				
2006				
2007				
Average	227,580	262,780	9,780	-25,420

Table 4A: Colorado's Sub-Basin Non-impairment Compliance

Basin	Allocation (Five-year Average)	Unallocated Supply (Five-year Average)	Imported Water Supply Credit (Five-year Average)	Total Available Supply	Computed Beneficial Consumptive Use (Five-year Average)	Available Supply - CBCU
North Fork			NA	0		0
Arikaree			NA	0		0
South Fork			NA	0		0
Beaver			NA	0		0

Table 4B: Kansas's Sub-Basin Non-impairment Compliance

Basin	Allocation (Five-year Average)	Unallocated Supply (Five-year Average)	Unused Allocation from Colorado (5-year running average)	Imported Water Supply Credit (Five-year Average)	Total Available Supply (5-year running average)	Computed Beneficial Consumptive Use (Five-year Average)	Available Supply - CBCU
Arikaree				NA	0		0
South Fork				NA	0		0
Driftwood				NA	0		0
Beaver				NA	0		0
Sappa				NA	0		0
Prairie Dog				NA	0		0

Table 5A: Colorado's Compliance During Water-Short Year Administration

Year	Allocation - Allocation Beaver	Computed Beneficial Consumptive Use - CBCU Beaver	Imported Water Supply Credit - IWS Beaver	Allocation - (CBCU - IWS Credit)
1999			NA	0
2000			NA	0
2001			NA	0
2002			NA	0
2003			NA	0
Average	#DIV/0!	#DIV/0!	NA	0

Table 5B: Kansas's Compliance During Water-Short Year Administration

Year	Allocation			Computed Beneficial Consumptive Use	Imported Water Supply Credit	Allocation - (CBCU - IWS)
	Sub-Basin Total	Kansas's Share of Unallocated Supply	Total			
1999			0		NA	0
2000			0		NA	0
2001			0		NA	0
2002			0		NA	0
2003			0		NA	0
Average	#DIV/0!	#DIV/0!	0	#DIV/0!	#DIV/0!	0

Table 5E: Nebraska's Tributary Compliance During Water-Short Year Administration

Year	Allocation			Computed Beneficial Consumptive Use	Imported Water Supply Credit	Allocation - (CBCU - IWS)
	Sub-Basin Total	Nebraska's Share of Unallocated Supply	Total			
1999			0			0
2000			0			0
2001			0			0
2002			0			0
2003			0			0
Average	#DIV/0!	#DIV/0!	0	#DIV/0!	#DIV/0!	0

Table 5C: Nebraska's Compliance During Water-Short Year Administration

Year	Allocation			Computed Beneficial Consumptive Use			Imported Water Supply Credit above Guide Rock	Allocation - (CBCU - IWS above Guide Rock)
	State-Wide Allocation	Allocation Below Guide Rock	Allocation Above Guide Rock	State-Wide CBCU	CBCU Below Guide Rock	CBCU Above Guide Rock		
2002			0			0		0
2003			0			0		0
Average	#DIV/0!	#DIV/0!	0	#DIV/0!	#DIV/0!	0	#DIV/0!	0

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

Year	Allocation			Computed Beneficial Consumptive Use			Imported Water Supply Credit above Guide Rock	Allocation - (CBCU - IWS above Guide Rock)
	State-Wide Allocation	Allocation Below Guide Rock	Allocation Above Guide Rock	State-Wide CBCU	CBCU Below Guide Rock	CBCU Above Guide Rock		
2001			0			0		0
2002			0			0		0
2003			0			0		0
Average	#DIV/0!	#DIV/0!	0	#DIV/0!	#DIV/0!	0	#DIV/0!	0

Attachment 6: Computing Water Supplies and Consumptive Use Above Guide Rock

Total Mainstem CWS	Hardy Gage	Superior Courtland Diversion Dam	Courtland Canal Diversions	Superior Canal Diversion	Courtland Canal Returns	Superior Canal Returns	Total Bostwick Returns Below Guide Rock	NE CBCU Below Guide Rock	KS CBCU Below Guide Rock	Total CBCU Below Guide Rock	Gain Guide Rock to Hardy	VWS Guide Rock to Hardy	Mainstem VWS Above Hardy	NE MS Allocation Above Hardy	KS MS Allocation Above Hardy	Nebraska Guide Rock to Hardy Allocation	Kansas Guide Rock to Hardy Allocation
168,590	52,394	21,346	66,500	8,174	11,829	4,659	16,488	3,731	908	4,639	19,199	23,837	192,427	11,656	98,330	11,656	12,181

COURTLAND CANAL	
Return Flow From Courtland Canal To Republican River Above Hardy From Kansas	779
Return Flow From Courtland Canal To Republican River Above Hardy From Nebraska	11,050
Courtland Canal Diversions At Headgate	66500
Courtland Canal At Kansas-Nebraska State Line	51952
NE Courtland Canal CBCU (includes transportation loss)	1,072
Superior Canal CBCU	3,515

NEBRASKA	
SW Diversions - Irrigation - Small Pumps - Nebraska Below Guide Rock	1,562
SW Diversions - M&I - Nebraska - Below Guide Rock	0
SW Return - Irrigation	390.5
SW Return - M&I	0
GW CBCU Nebraska Below Guide Rock	2559

KANSAS	
SW CBCU - Irrigation - Small Pumps	798
SW CBCU - M&I	0
GW CBCU Kansas	110

2003

Attachment 7: Calculations of Return Flows from Bureau of Reclamation Canals

Col 1	Col 2	Col 3	Col 4	Col 5	Col 6	Col 7	Col 8	Col 9	Col 10	Col 11
Canal	Canal Diversion	Spill to Waste-Way	Field Deliveries	Canal Loss	Average Field Loss Factor	Field Loss	Total Loss from District	Percent Field and Canal Loss That Returns to the Stream	Total return to Stream from Canal and Field Loss	Return as Percent of Canal Diversion
Name Canal	Headgate Diversion	Sum of measured spills to river	Sum of Deliveries to the field	Col 2 - Col 4	1 -Weighted Average Efficiency of Application System for the District*	Col 4 x Col 6	Col 5 + Col 7	Estimated Percent Loss*	Col 8 x Col 9	Col 10/Col 2
Example	100	5	60	40	30%	18	58	82%	48	48%
Culbertson	8002		3576	4426	30%	1073	5499	82%	4509	56%
Culbertson Extension	0		0	0	30%	0	0	82%	0	100%
Meeker - Driftwood	0		0	0	30%	0	0	82%	0	100%
Red Willow	0		0	0	30%	0	0	82%	0	100%
Bartley	0		0	0	30%	0	0	82%	0	100%
Cambridge	18332		10023	8309	30%	3007	11316	82%	9279	51%
Naponee	2162		1173	989	35%	411	1400	82%	1148	53%
Franklin	15262		5144	10118	35%	1800	11918	82%	9773	64%
Franklin Pump	1687		793	894	35%	278	1172	82%	961	57%
Almena	3379		1759	1620	30%	528	2148	82%	1761	52%
Superior	8174		3622	4552	31%	1123	5675	82%	4653	57%
Nebraska Courtland	1591		1245	346	23%	286	632	82%	519	33%
Courtland Canal Above Lovewell (KS)	17511		8375	9136	23%	1926	11062	82%	9071	52%
Courtland Canal Below Lovewell	35606		20490	15116	23%	4713	19829	82%	16260	46%

* The average field efficiencies for each district and percent loss that returns to the stream may be reviewed and, if necessary, changed by the RRCA to improve the accuracy of the estimates.

Impacts 2003 (acre-feet)				
Location	Colorado Pumping	Kansas Pumping	Nebraska Pumping	Nebraska Mound
Arikaree	242	100	508	0
Beaver	0	274	777	0
Buffalo	265	0	3338	0
Driftwood	0	0	1391	0
Frenchman	37	0	81210	0
North Fork	14023	17	1402	0
Above Swanson	112	-40	17979	0
Swanson - Harlan	0	53	27271	144
Harlan - Guide Rock	0	0	27709	181
Guide Rock - Hardy	0	59	2559	0
Medicine	0	0	20684	9423
Prairie Dog	0	1137	0	0
Red Willow	0	0	6056	20
Rock	59	0	3419	0
Sappa	0	-274	500	0
South Fork	10790	5351	1347	0
Hugh Butler	0	0	1759	0
Bonny	1325	0	0	0
Keith Sebelius	0	542	0	0
Enders	0	0	4437	0
Harlan	0	38	881	12
Harry Strunk	0	0	455	0
Swanson	20	0	483	0
Mainstem	108	77	75517	320
Total	26872	7274	204164	9782
MS's 4 reaches + 2 reservoirs	132	110	76882	337
NE above Guide Rock			74323	337
Total of individual sub-basins	26873	7257	204165	9780

COURTLAND CANAL ABOVE LOVEWELL

Revised for Compact Accounting Calculations: Dec. 17, 2003

2003																						
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19				
	Records	Records	District	(3 + 4)	(2 - 5)	District	Records	(7 + 8)	(3 - 9)	6-(6x(3/5))	(6-11)x(7/9)	(6-11-12)	(10 x 7/9)	(10 - 14)	(4 + 11)	(7 + 12 + 14)	(8 + 13 + 15)	(16+17+18)				
Month	Court Canal 0.7	Court Canal 15.1	NEB Bost Use Main Canal 0.7 to 15.1	Total out flow in NEB 0.7 to 15.1	Total Loss in NEB 0.7 to 15.1	KAN Bost Use Main Canal 15.1 to 34.8	DEL to Lovell Court Canal 34.8	Total out flow in KAN 15.1 to 34.8	Total Loss in KAN 15.1 to 34.8	ALLOCATION OF LOSSES						TOTAL ALLOCATION ABOVE LOVEWELL			(= 2) C H E C K			
										LOSS IN NEBRASKA			LOSS IN KANSAS			Courtland Canal				Courtland Canal		
										0.7 to 15.1			15.1 to 34.8			0.7 to 15.1				15.1 to 34.8		
										NEB Bost	KAN Bost	USBR	KAN Bost	USBR	NEB Bost	KAN Bost	USBR					
January	5203	4271	0	4271	932	0	3355	3355	916	0	0	932	0	916	0	0	5203	5203				
February	2548	2163	0	2163	385	0	1740	1740	423	0	0	385	0	423	0	0	2548	2548				
March	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
April	5313	4144	0	4144	1169	0	3167	3167	977	0	0	1169	0	977	0	0	5313	5313				
May	7233	5699	0	5699	1534	0	4231	4231	1468	0	0	1534	0	1468	0	0	7233	7233				
June	5453	4169	0	4169	1284	0	1426	1426	2743	0	0	1284	0	2743	0	0	5453	5453				
July	15543	12073	940	13013	2530	8704	2061	10765	1308	182	1898	450	1058	250	1122	11660	2761	15543				
August	10511	8423	394	8817	1694	4590	3288	7878	545	75	943	676	318	227	469	5851	4191	10511				
September	3365	2472	0	2472	893	0	1582	1582	890	0	0	893	0	890	0	0	3365	3365				
October	3064	2129	0	2129	935	0	1189	1189	940	0	0	935	0	940	0	0	3064	3064				
November	3880	2950	0	2950	930	0	2006	2006	944	0	0	930	0	944	0	0	3880	3880				
December	4387	3459	0	3459	928	0	2550	2550	909	0	0	928	0	909	0	0	4387	4387				
Total	66500	51952	1334	53286	13214	13294	26595	39889	12063	257	2841	10116	1376	10687	1591	17511	47398	66500				

BOSTWICK DIVISION
FRANKLIN UNIT

Month	HARLAN COUNTY LAKE						FRANKLIN CANAL		NAPONEE CANAL	
	Data from Corps of Engineers						Release To Canal (AF)	Delivered To Farms (AF)	Release To Canal (AF)	Delivered To Farms (AF)
	(AF)	(AF)	(AF)	(in.)	(Inches)	(AF)				
Jan.	280	0	652	1.22	0.21	160,085	0	0	0	0
Feb.	1,974	0	675	1.26	0.39	161,384	0	0	0	0
Mar.	3,729	0	944	1.75	0.30	164,168	0	0	0	0
Apr.	8,073	0	2,469	4.52	3.44	169,771	0	0	0	0
May	8,499	0	2,641	4.73	2.23	175,629	0	0	0	0
June	7,855	1,490	3,378	5.87	4.48	178,616	0	0	0	0
July	3,223	32,760	6,880	13.95	1.09	142,202	9,899	2,759	1,488	797
Aug.	1,184	16,987	5,126	10.57	1.83	121,273	5,363	2,385	674	376
Sep.	873	0	4,406	7.27	1.39	117,739	0	0	0	0
Oct.	2,221	0	4,384	6.80	0.89	115,579	0	0	0	0
Nov.	422	0	1,718	0.00	0.37	114,283	0	0	0	0
Dec.	97	0	1,034	0.00	0.08	113,346	0	0	0	0
TOTAL	38,430	51,237	34,307	58	16.70	--	15,262	5,144	2,162	1,173

NOTE: Acres irrigated 2003: Franklin Canal - 11,262 acres; Naponee Canal - 1,628 acres.

BOSTWICK DIVISION (Continued)
SUPERIOR-COURTLAND UNIT

Month	FRANKLIN PUMP CANAL		SUPERIOR CANAL		Total Diversion (AF)	NEBRASKA USE		KANSAS USE	
	Diverted To Canal (AF)	Delivered To Farms (AF)	Diverted To Canal (AF)	Delivered To Farms (AF)		Total (AF)	Delivered To Farms (AF)	Diversion To Canal (AF)	Delivered To Farms (AF)
	Jan.	0	0	0		0	5,203	0	0
Feb.	0	0	0	0	2,548	0	0	0	0
Mar.	0	0	0	0	0	0	0	0	0
Apr.	0	0	0	0	5,313	0	0	0	0
May	0	0	0	0	7,233	0	0	0	0
June	0	0	501	0	5,453	0	0	0	0
July	1,184	544	5,194	2,290	15,543	1,054	879	11,715	5,363
Aug.	503	249	2,479	1,332	10,511	437	366	5,870	3,012
Sep.	0	0	0	0	3,365	0	0	0	0
Oct.	0	0	0	0	3,064	0	0	0	0
Nov.	0	0	0	0	3,880	0	0	0	0
Dec.	0	0	0	0	4,387	0	0	0	0
TOTAL	1,687	793	8,174	3,622	66,500	1,491	1,245	17,585	8,375

NOTE: Acres irrigated 2003: Franklin Pump Canal - 2,106 acres; Superior Canal - 5,972 acres.
Courtland Canal-Nebraska use - 1,967 acres.
Courtland Canal-Kansas use - 13,433 acres.

BOSTWICK DIVISION (Continued)
COURTLAND UNIT

Month	LOVEWELL RESERVOIR		Gross Evap. (AF)	(in.) Pan Evap.	Precip. (Inches)	End of Month Content (AF)	Est. Flow from White Rock Creek (AF)	Inflow from Courtland 34.8 (AF)	COURTLAND (Below)	
	Total Inflow (AF)	Outflow (AF)							Release To Canal (AF)	Delivered To Farms (AF)
Jan.	3,653	12	161	1.02	0.26	3,480	298	3,355	0	0
Feb.	2,965	11	201	1.20	0.77	6,233	1,225	1,740	0	0
Mar.	587	12	369	2.15	1.51	6,439	587	0	0	0
Apr.	4,297	17	660	3.72	2.52	10,059	1,130	3,167	0	0
May	5,778	588	927	4.92	3.70	14,322	1,546	4,232	472	0
June	10,676	4,163	1,382	6.88	10.84	19,453	9,250	1,426	3,647	0
July	3,191	20,887	2,016	11.25	0.26	-259	1,130	2,061	19,015	12,118
Aug.	4,930	13,330	1,083	8.09	4.30	-9,742	1,642	3,288	12,472	8,372
Sep.	4,040	19	701	5.03	4.78	-6,422	2,458	1,582	0	0
Oct.	1,427	16	601	4.57	0.83	-5,612	238	1,189	0	0
Nov.	2,888	12	357	0.00	1.92	-3,093	882	2,006	0	0
Dec.	3,123	12	174	0.00	0.73	-156	573	2,550	0	0
TOTAL	47,555	39,079	8,632	48.83	32.42	--	20,959	26,596	35,606	20,490

NOTE: Acres irrigated 2003: Courtland Canal below Lovewell - 26,991 acres.