

Example of Distribution of Nebraska's Allocation to Surface Water and Ground Water Uses
 This distribution is based on the 1998-2002 depletions to stream flow by surface water and ground water uses.

	Depletions		Total	Percent of Total Depletion		Percent Depletion of GW by NRD	
	GW	SW		GW	SW		
1998	185460	112290	297750	62.3%	37.7%	URNRD	44%
1999	203490	99400	302890	67.2%	32.8%	MRNRD	30%
2000	184020	112510	296530	62.1%	37.9%	LRNRD	26%
2001	212870	79450	292320	72.8%	27.2%		100%
2002	180440	85470	265910	67.9%	32.1%		
Average				66%	34%		

Total Percentage of Nebraska Allocation Used by Surface Water and by NRD Ground Water Pumping 1998-2002

SW	34%
URNRD	29%
MRNRD	20%
LRNRD	17%
	100%

To develop percentages to distribute Allocation - Used Tc, not Vc for amount allowed to deplete to also restrict use of IWS Tri-Basin NRD is not included as long as IWS greater than 0. This rule reflects that fact that there is no obligation that water imports from the Platte must be maintained. If IWS becomes zero, new accounting and distribution of allocation will have to be developed to reflect the depletions due to wells within the RRCA basin in Tri-Basin that are depleting Republican River stream flow.

	288,462	Allocation to SW and NRD	
Total Allocation* =			
Allocation to Surface Water	34%	96,804 Total SW	96,804
Allocation to UFNRD Ground Water	29%	84,329	
Allocation to MRNRD Ground Water	20%	57,497	
Allocation to LRNRD Ground Water	17%	49,831	
		Total GW	191,658
	100%	288,462	288,462

*For example equals average allocation for years 1998-2002

For administration, total surface water depletions would be limited to the maximum of allocated supply or diversions - return flows with actual administration being done on surface water first in time, first in right.

Such administration would require a continued accounting of surface water diversions and calculations of the resulting compact depletions. This method would allow surface water users to use their fair share of water based on the 1998-2002 calculations but would protect any other inflows due to restrictions of ground water use from further depletion by surface water diversions.

If water was purchased as part of an augmentation plan, the purchased water could be protected from further surface water diversions.

	GIR inches per acre		Cert Ac	Volume af		Percent	CIR		Depletions
	High	Low		High	Low				
URNRD	20	18	448924	748207	673386	47%	58.5	51%	44%
MRNRD	18	14	313198	469797	365398	29%	29	28%	30%
LRNRD	14	10	328397	383130	273664	24%	20.5	21%	26%
				1601134	1312448	100%		100%	100%

Difference

3%	7%
-1%	-2%
-2%	-5%

Average Baseline Volume

	QR	Upland	Total	% Use
Total	272,805	768,993	1,041,798	
LR	113,190	146,929	260,119	0.25
MR	97,741	178,279	276,020	0.26
UR	61,873	443,785	505,658	0.49

Percent of Impacts	
LR	0.26
MR	0.3
UR	0.44

Average Baseline Acres

	QR	Upland	Total	Cert. Acres
Total	265,930	720,106	986,036	1085000
LR	119,641	153,642	273,283	325000
MR	91,458	160,535	251,993	312000
UR	54,832	405,929	460,761	448000

Certified Acres

QR	Upland	Total
321,170	768,425	1,089,595
142,944	185,453	328,397
108,226	204,972	313,198
70,000	378,000	448,000

Scenario 1

Overall = 0.15		QR = 0.25		
	QR Vol	Upland Vol	Total	% Use
Total	173,913	653,644	827,557	
LR	87,478	116,938	204,416	0.25
MR	68,073	143,674	211,748	0.26
UR	18,361	393,031	411,392	0.50

estimate

	QR Reduction	Upland Reduction	Total Reduction	% Total Reductions
Total	98,892	115,349	214,241	
LR	25,712	29,991	55,703	0.26
MR	29,668	34,605	64,272	0.30
UR	43,512	50,754	94,266	0.44

Percent of Baseline volume allowed				
	QR	Upland	Total	
Total	0.64	0.85	0.79	
LR	0.77	0.80	0.79	
MR	0.70	0.81	0.77	
UR	0.30	0.89	0.81	

	QR Allocation	Upland Allocation
LR	7.3	7.6
MR	7.5	8.4
UR	3.1	12.5

Scenario 2

Overall = 0.05		QR = 0.34		
	QR Vol	Upland Vol	Total	% Use
Total	171,049	730,543	901,592	
LR	86,733	136,932	223,665	0.25
MR	67,214	166,744	233,958	0.26
UR	17,100	426,867	443,967	0.49

	QR Reduction	Upland Reduction	Total Reduction	% Total Reductions
Total	101,756	38,450	140,206	
LR	26,457	9,997	36,454	0.26
MR	30,527	11,535	42,062	0.30
UR	44,773	16,918	61,691	0.44

Percent of Baseline volume allowed				
	QR	Upland	Total	
Total	0.63	0.95	0.87	
LR	0.77	0.93	0.86	
MR	0.69	0.94	0.85	
UR	0.28	0.96	0.88	

	QR Allocation	Upland Allocation
LR	7.3	8.9
MR	7.5	9.8
UR	2.9	13.6

Scenario 3

Overall = 0.32		QR = 0.00		
	QR Vol	Upland Vol	Total	% Use
Total	185,507	522,915	708,423	
LR	90,493	82,949	173,441	0.24
MR	71,552	104,456	176,007	0.25
UR	23,462	335,511	358,973	0.51
	QR Reduction	Upland Reduction	Total Reduction	% Total Reductions
Total	87,298	246,078	333,375	
LR	22,697	63,980	86,678	0.26
MR	26,189	73,823	100,013	0.30
UR	38,411	108,274	146,685	0.44
	QR Allocation	Upland Allocation		
LR	7.6	5.4		
MR	7.9	6.1		
UR	4.0	10.7		

Percent of Baseline volume allowed			
	QR	Upland	Total
Total	0.68	0.68	0.68
LR	0.80	0.56	0.67
MR	0.73	0.59	0.64
UR	0.38	0.76	0.71

Scenario 4

Overall = 0.00		QR = 0.40		
	QR Vol	Upland Vol	Total	% Use
Total	163,683	768,993	932,676	
LR	84,818	146,929	231,747	0.25
MR	65,004	178,279	243,283	0.26
UR	13,859	443,785	457,644	0.49
	QR Reduction	Upland Reduction	Total Reduction	% Total Reductions
Total	109,122	0	109,122	
LR	28,372	0	28,372	0.26
MR	32,737	0	32,737	0.30
UR	48,014	0	48,014	0.44
	QR Allocation	Upland Allocation		
LR	7.1	9.5		
MR	7.2	10.4		
UR	2.4	14.1		

Percent of Baseline volume allowed			
	QR	Upland	Total
Total	0.60	1.00	0.90
LR	0.75	1.00	0.89
MR	0.67	1.00	0.88
UR	0.22	1.00	0.91

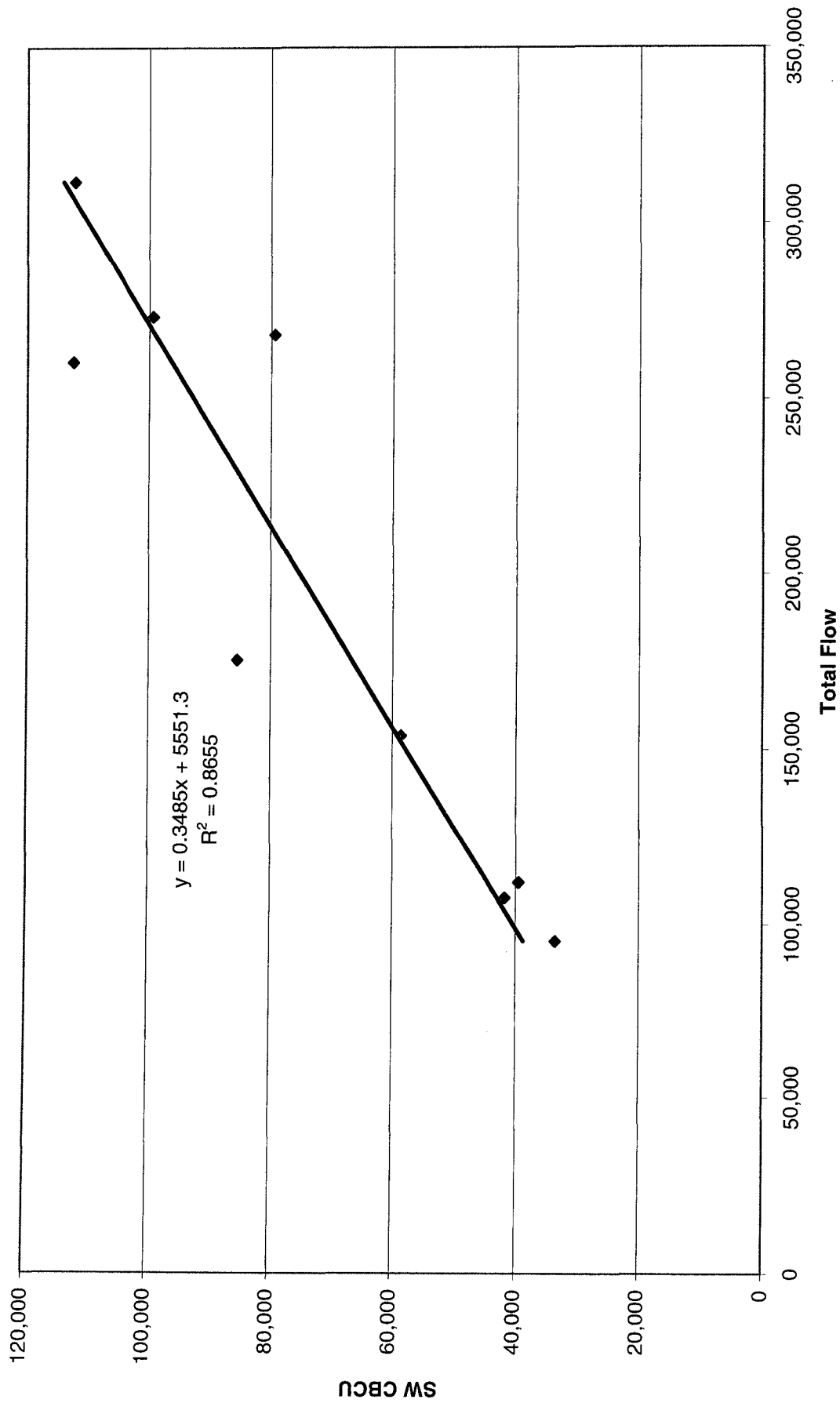
	Overall % = 15	CREP	Alloc.	Reduction	Meter adj. (est.)			Depletion by NRD		
	Net NE	CREP	Alloc.	Reduction	LR	MR	New Net NE	LR	MR	UR
2003	-16260									
2004	-27950									
2005	-31708									
2006	-35904	2,231	1,823		872	137				
2007	-27955.5	4,151	3,457		1,234	263	-18,851			
2008	-27955.5	5,568	4,106	4,653	1,450	352	-11,827	1,210	1,396	2,047
2009	-27955.5	6,288	4,134	7,354	1,329	451	-8,400	1,912	2,206	3,236
2010	-27955.5	7,596	6,712	9,421	1,549	482	-2,196	2,449	2,826	4,145
2011	-27955.5	6,519	7,689	10,456	1,732	526	-1,034	2,719	3,137	4,601
2012	-27955.5	7,539	7,250	10,877	1,730	579	20	2,828	3,263	4,786

	Overall % = 5	CREP	ALL	Reduction	Meter adj. (est.)			Depletion by NRD		
	Net NE	CREP	ALL	Reduction	LR	MR	New Net NE	LR	MR	UR
2003	-16260									
2004	-27950									
2005	-31708									
2006	-35904	2,231	1,823		872	137				
2007	-27955.5	4,151	3,457		1,234	263	-18,851			
2008	-27955.5	5,568	4,106	4,476	1,450	352	-12,004	1,164	1,343	1,969
2009	-27955.5	6,288	4,134	7,120	1,329	451	-8,634	1,851	2,136	3,133
2010	-27955.5	7,596	6,712	9,103	1,549	482	-2,514	2,367	2,731	4,005
2011	-27955.5	6,519	7,689	10,240	1,732	526	-1,250	2,662	3,072	4,505
2012	-27955.5	7,539	7,250	10,786	1,730	579	-71	2,804	3,236	4,746

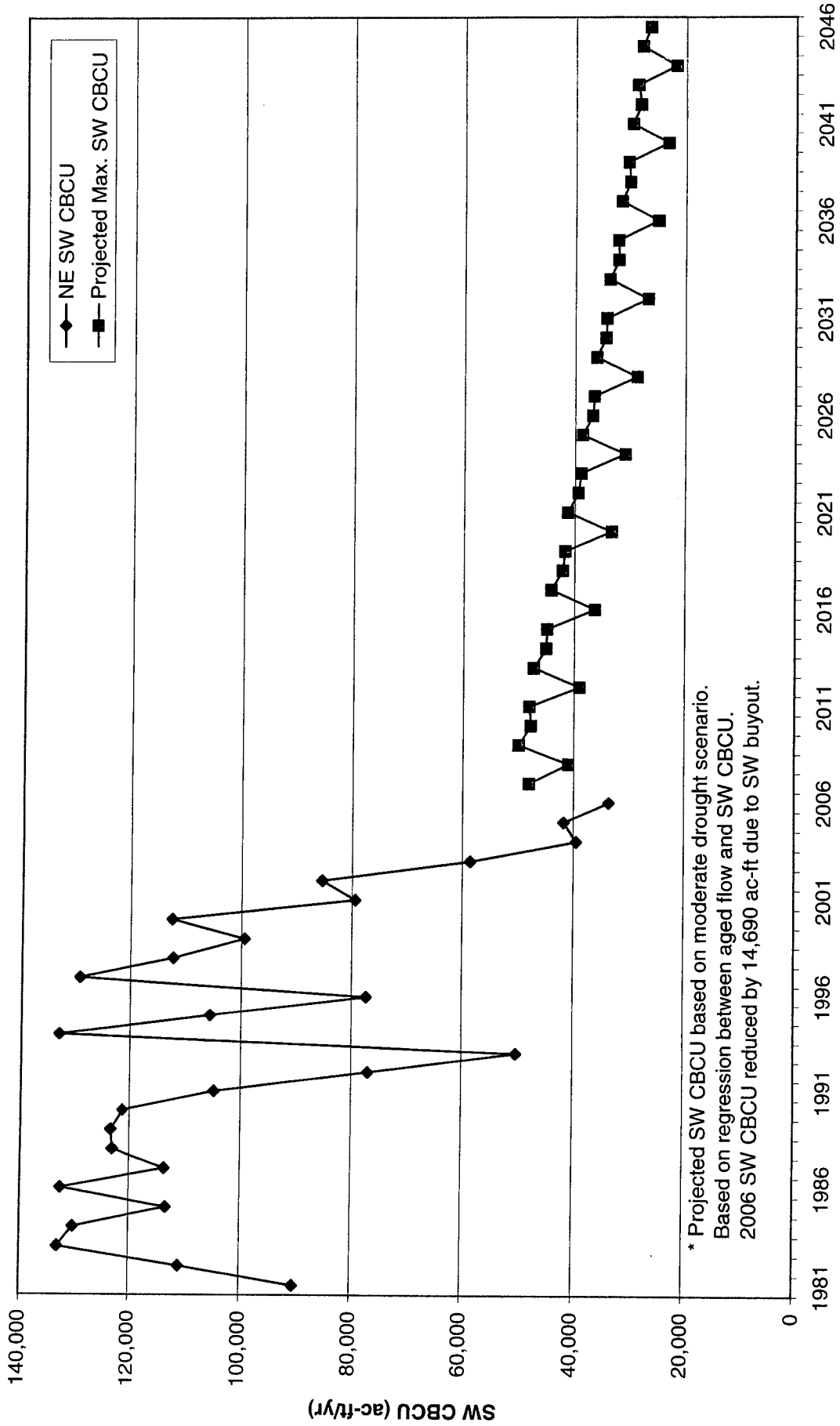
	Overall % = 32	CREP	ALL		Meter adj. (est.)			Depletion by NRD		
	Net NE	CREP	ALL		LR	MR	New Net NE	LR	MR	UR
2003	-16260									
2004	-27950									
2005	-31708									
2006	-35904	2,231	1,823		872	137				
2007	-27955.5	4,151	3,457		1,234	263	-18,851			
2008	-27955.5	5,568	4,106	4,273	1,450	352	-12,206	1,111	1,282	1,880
2009	-27955.5	6,288	4,134	6,772	1,329	451	-8,982	1,761	2,031	2,980
2010	-27955.5	7,596	6,712	8,673	1,549	482	-2,944	2,255	2,602	3,816
2011	-27955.5	6,519	7,689	9,789	1,732	526	-1,700	2,545	2,937	4,307
2012	-27955.5	7,539	7,250	10,783	1,730	579	-75	2,804	3,235	4,744

	Overall % = 0	CREP	ALL		Meter adj. (est.)			Depletion by NRD		
	Net NE	CREP	ALL		LR	MR	New Net NE	LR	MR	UR
2003	-16260									
2004	-27950									
2005	-31708									
2006	-35904	2,231	1,823		872	137				
2007	-27955.5	4,151	3,457		1,234	263	-18,851			
2008	-27955.5	5,568	4,106	4,531	1,450	352	-11,948	1,178	1,359	1,994
2009	-27955.5	6,288	4,134	7,241	1,329	451	-8,513	1,883	2,172	3,186
2010	-27955.5	7,596	6,712	9,270	1,549	482	-2,347	2,410	2,781	4,079
2011	-27955.5	6,519	7,689	10,361	1,732	526	-1,129	2,694	3,108	4,559
2012	-27955.5	7,539	7,250	10,799	1,730	579	-59	2,808	3,240	4,751

Relationship between total gaged flow and NE SW CBCU from 1998-2006

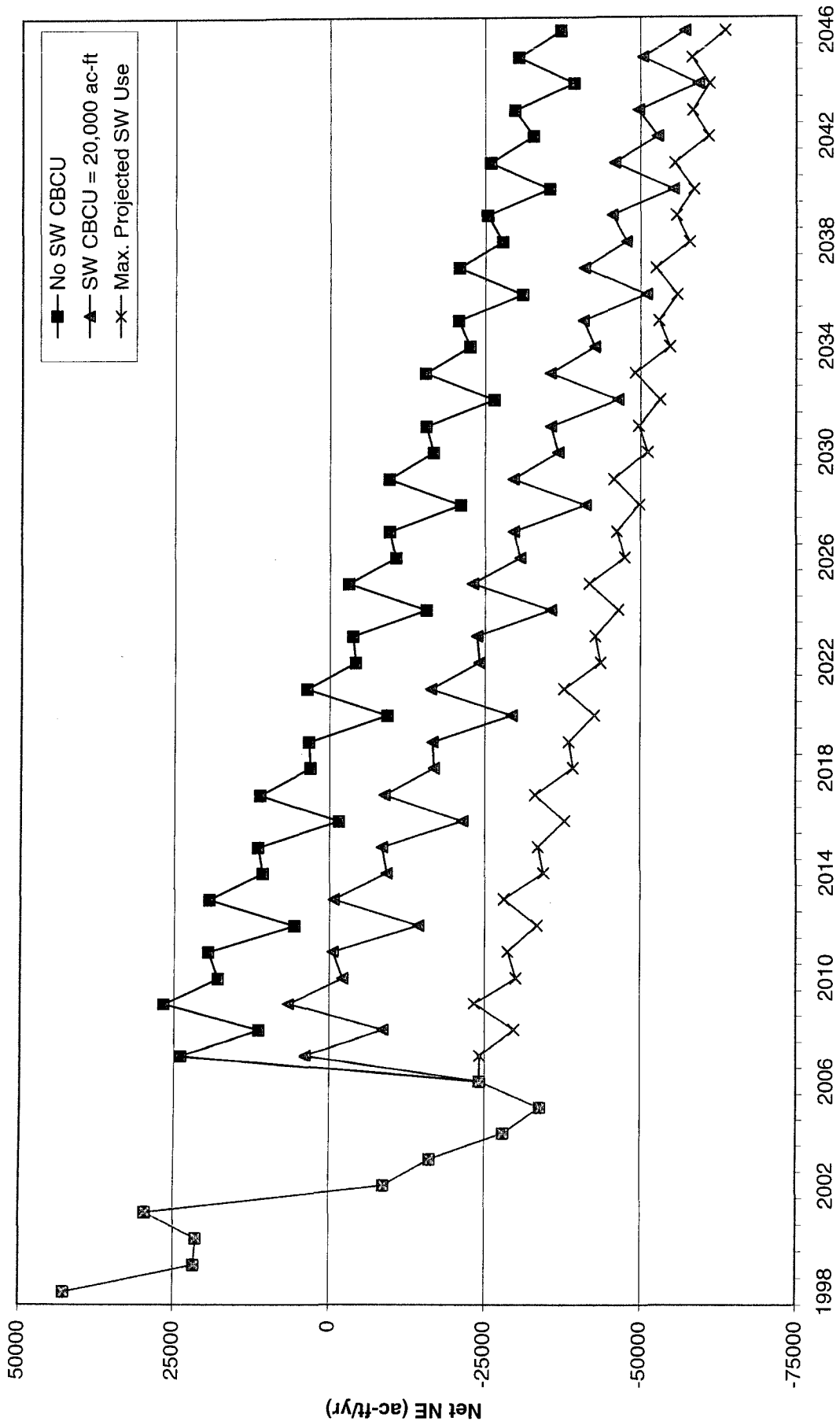


Historic and projected SW CBCU



* Projected SW CBCU based on moderate drought scenario.
 Based on regression between aged flow and SW CBCU.
 2006 SW CBCU reduced by 14,690 ac-ft due to SW buyout.

Historic and projected NE shortfall for various levels of SW use



Three year running average percent of streamflow depletion by NRD

