

Jim Williams

From: Ann Bleed [ableed@dnr.ne.gov]
Sent: Wednesday, February 21, 2007 2:55 PM
To: Stephen Ronshaugen; Marv Swanda; Jim Schneider; Jim Williams; Dale Cramer; Brad Edgerton; Brian Dunnigan; Dan Smith; David Cookson; Jasper Fanning; John Thorburn; Justin Lavene; Michael Clements; Mike Thompson; Pam Andersen; Paul Koester; Tina Kurtz
Subject: Draft Outline of RRCA compliance plan
Attachments: RRPlan 2-21-07.doc



RRPlan 2-21-07.doc
(31 KB)

Attached is a draft write-up of the compliance plan that was discussed at our meeting on February 15. Please review this and be prepared to offer any changes you see fit at the meeting tomorrow. Thanks. Ann

DRAFT
**Proposed Plan for DNR and NRD Implementation Plans
to Maintain Compliance with the Republican River Basin
Compact**

Near-Term Plan

The following is an outline of the plan that we will implement for the years 2008 – 2012. The goal is to achieve a balance between our annual Allocations and Computed Beneficial Consumptive Use as required by the Republican River Compact by year 2012. To accomplish this goal we will need both increased funding and increased regulations. The basic components of the plan are as follows:

I. The NRDs recognize that there is little opportunity to receive significant levels of funding from State sources but desire that some level of matching funds be provided. The NRDs also recognize that under the current law the ability to raise funds locally cannot adequately fund the potential programs or actions that may be needed to fully implement our Integrated Management Plans. Therefore, the NRDs wish to have the legislature pass legislation that would allow the NRDs to raise money to implement ground water management activities and integrated management activities. This money would be raised through either:

A. A levy of an additional 3 ¢ on each \$100 of taxable evaluation or the establishment of a water use fee

B. This money could be used to:

1. augment water supplies in the basin through:

— a) the buyout of water from existing surface water or ground water users;

DRAFT

Proposed Plan for DNR and NRD Implementation Plans to Maintain Compliance with the Republican River Basin Compact

b) the construction of augmentation projects that import water or retine the use of water in the basin;

c) manage vegetation to increase channel flow capacity or reduce nonbeneficial consumptive use of water with the result of increasing stream flow;

2. compensate those water users subjected to greater regulation than others in the NRD by virtue of the fact their surface water projects or wells are so situated that curtailment of water use will provide extra stream flow in a timely manner;

3. implement other water management activities that will enable the DNR and or the NRD to achieve the goals of an Integrated Management Plan or Ground Water Management Plan.

II. Every two years the DNR will determine if reductions are necessary and if so, the amount of reductions in stream flow depletions that will be required to reach a point where Nebraska's Computed Beneficial Consumptive Use (CBCU) is less than its Allocation. The following steps will be used to calculate any required reductions by each NRD:

A. Using a moderate drought climate scenario, DNR will determine the total reduction requirement needed to achieve a CBCU less than the Allocation within five years.

B. Reductions achieved through State funded CREP and EQIP programs or other surface water or ground water use buyout programs will be calculated and subtracted from the initial estimate of the required reduction;

C. Responsibility for the remaining amount of reduction required will be allocated to each NRD based on the

DRAFT

Proposed Plan for DNR and NRD Implementation Plans to Maintain Compliance with the Republican River Basin Compact

percentage of depletions caused by ground water pumping in each NRD for the years 1998-2002:

1. LRNRD = 26%
2. MRNRD = 30%
3. URNRD = 44%
4. Tri-Basin NRD must maintain a positive Imported Water Supply (not Imported Water Supply Credit) from the Platte Basin.

D. The NRDs will establish allocations for the next two year period based on any necessary reductions. After two years, an assessment of the water supplies and expected Allocation will be revised and adjustments to the allocations will be made to insure that we maintain a balance between Allocations and CBCU. If water supplies increase, allocations can be increased. If the drought continues or worsens, allocations will be decreased.

E. Any NRD that has implemented an augmentation plan that provides accretions to stream flow can use these accretions to offset their depletions. The amount of the accretions will be determined by the Republican River Compact Administration Accounting Procedures and the DNR.

III. Any funding received from the State to assist the NRD's efforts to comply with the Compact will be distributed to the NRDs in proportion to the amount of money used by the NRDs for augmenting stream flows.

IV. Administration of surface water

A. Any accretions resulting from augmentation programs paid for by the State or an NRD will be protected from

DRAFT

Proposed Plan for DNR and NRD Implementation Plans to Maintain Compliance with the Republican River Basin Compact

surface water diversions and will be available to fulfill the requirements of the Republican River Compact.

B. To determine the remaining water available for surface water diversions the State will determine:

1. the total Nebraska Allocation under the Compact
2. the amount of water allocated to surface water use based on the percentage depletion caused by surface water diversions for the years 1998-2002.
3. surface water appropriators will be allowed to divert the water available for diversion or the maximum allocated to surface water, whichever is less.

C. The State will administer surface water diversions first in time first in right, but will not allow the total depletions to exceed the water allocated to surface water use.

DRAFT
**Proposed Plan for DNR and NRD Implementation Plans
to Maintain Compliance with the Republican River Basin
Compact**

Long Term Plan

Once a balance between Allocations and CBCU is achieved, the following plan will be implemented.

I. Each year the DNR will estimate the expected allocation to Nebraska and determine how much of Nebraska's allocation can be used to remain within the five year running average or if it is a Water-Short-Year, the two or three year average as required by the Compact.

II. The DNR will distribute Nebraska's allocation to surface water and ground water based on the percentage depletions to surface water use and each NRD for the years 1998-2002. The percentages are:

A. Surface Water = 34%

B. Ground Water 66% allocated to each NRD according to the following percentages

1. URNRD 44%

2. MRNRD 30%

3. LRNRD 26%

4. The Tri-Basin NRD will maintain a positive Imported Water Supply as computed by the Republican River Compact Administration Ground Water Model

DRAFT

Proposed Plan for DNR and NRD Implementation Plans to Maintain Compliance with the Republican River Basin Compact

V. Administration of Allocations

A. Surface water users will be able to divert the surface water allocation or whatever water is available for diversion, whichever is less. Diversions will be administered first in time, first in right.

B. Each NRD agrees to restrict ground water pumping within the NRD so that ground water depletions within the NRD do not exceed the allocation for the NRD

C. Any accretions resulting from augmentation programs paid for by the State or an NRD will be protected from surface water diversions and will be available to fulfill the requirements of the Republican River Compact.. NRD augmentation plans can be used by the NRD to offset depletions within the NRD.

Note: Compact compliance will be achieved by restricting both surface water and ground water depletions to their respective allocations and any increased streamflow over the targets resulting from either ground water well regulation or increased precipitation will go toward a credit that can be used in the following year.

e

	Overall % = 15	CREP	Add. QR = 25	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	Add. QR = 34	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	Add. QR = 0	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	4,273	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	Add. QR = 40	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	4,531	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

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		

This assumes current (2007) level of development, & average rainfall from 1988-91 (moderate drought)

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

Baseline is level of current development, with 1988-1991 rainfall (moderate drought)

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

estimate

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

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

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