

Colorado River Risk Study Phase III

Slides were picked to show an over view of the recent Phase III Update. For further details please see the Phase III Risk Assessment Slides and background information available on the Roundtable's website.

General Observations

1. Of Colorado's approximate 2.5 Maf of average annual consumptive use, approximately 1.6 Maf is attributable to Pre-Compact rights, and 900 Kaf is Post-Compact
2. TMDs constitute over half of the Post-Compact depletions (56%)
3. Because of #2, the Colorado mainstem users comprise 2/3 of all Post-Compact uses
4. The large TMDs often end up being the swing call, even across different volumetric reductions
5. Allocating deficit volumes pro-rata by sub-basin depletions results in substantially different administration dates for certain sub-basins when compared to state-wide curtailment of call Colorado River water users

Note: All results presented herein are preliminary and subject to change

A Closer Look at Pre/Post Compact Depletions

Basin	Average Annual Depletions (acre-feet)		
	All Users	Pre-Compact	%Pre-Compact
Yampa	196,982	138,544	70%
White	62,060	50,173	81%
Colorado	1,220,386	594,169	49%
<i>In-Basin</i>	669,397	574,997	86%
<i>TMDs</i>	550,989	19,173	3%
Gunnison	552,418	495,147	90%
Southwest	500,717	322,561	64%
Total	2,532,564	1,600,594	63%

Basin	Average Annual Depletions (af)	
	Post-Compact	% of Total
Yampa	58,438	6.3%
White	11,887	1.3%
Colorado	626,216	67.2%
<i>In-Basin</i>	94,400	10.1%
<i>TMDs</i>	531,816	57.1%
Gunnison	57,271	6.1%
Southwest	178,157	19.1%
Total	931,969	100.0%

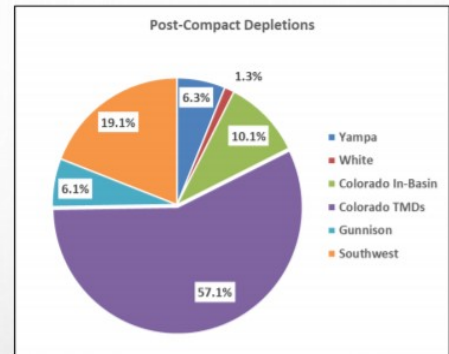
Impact of a Single State-Wide Partial Call on each Sub-Basin

Target Volume (acre-feet/yr)	Yampa	White	Colorado	<i>In-Basin</i>	<i>TMDs</i>	Gunnison	Southwest
100,000 (Jul 1957)	28%	3%	59%	22%	37%	6%	8%
	27,627	2,753	59,124	22,309	36,815	5,925	7,528
300,000 (Sep 1940)	16%	2%	59%	20%	39%	7%	13%
	47,987	5,325	177,976	59,918	118,058	20,862	40,233
600,000 (Aug 1935)	8%	1%	55%	12%	44%	4%	19%
	49,679	8,478	331,556	69,452	262,105	26,163	113,862
Full	6%	1%	66%	10%	56%	8%	19%
	58,440	11,888	626,171	94,403	531,834	57,273	178,163

Partial Curtailment – by Sub-Basin

Q: How deep would the calls be in each basin to yield these volumes?

Assume that each sub-basin is responsible for reducing consumptive use by a volume of water based on the post-compact depletions *in that sub-basin* relative to the State as a whole



Target Volume (acre-feet/yr)	Yampa	White	Colorado	In-Basin	TMDs	Gunnison	Southwest
	6.3%	1.3%	67.2%	10.1%	57.1%	6.1%	19.1%
100,000	6,270	1,276	67,186	10,129	57,064	6,145	19,116
300,000	18,811	3,827	201,557	30,387	171,191	18,436	57,348
600,000	37,622	7,653	403,114	60,774	342,382	36,871	114,697
932,000	58,440	11,888	626,171	94,403	531,834	57,273	178,163

Sub-Basin Distribution

For a given target volume, administration dates are developed for each sub-basin

Target Volume (acre-feet/yr)	Yampa	White	Colorado	Gunnison	Southwest
	6.3%	1.3%	67.2%	6.1%	19.1%
100,000	6,270	1,276	67,186	6,145	19,116
	Jul 1972	Jul 1962	Jul 1957	Nov 1957	Sep 1940
300,000	18,811	3,827	201,557	18,436	57,348
	Aug 1962	May 1955	Nov 1935	Apr 1955	Sep 1940
600,000	37,622	7,653	403,114	36,871	114,697
	Jun 1952	Jan 1938	Aug 1935	Dec 1933	Nov 1935