

January 5, 2004 - Conference Call

Reduction Baseline. REPEAT 81-2000 SW<sub>x</sub>

Dave Cookson questions about xls file from Ann

① What was cycled for 2001-2010 using 1981-2000 data

Chuck Spaulding:

$$\text{Gage Flow} = \text{Run off} + \text{baseflow}$$

described data manipulation

② Did you start w/ <sup>year</sup> 2000 # of wells w/ 1981 rate for 2001 estimate

Chuck: yes

③ KS + Co numbers were recycled, but NE changed...

CU in columns B, C, D to H, I, J

Federal Reservoir Change in Storage

$$\text{CWS} = \text{VWS} - \Delta \text{Storage} - \text{Flood Flows} \quad (\text{Appendix C, pg 10})$$

Ann needs to redo spreadsheet

$$\text{Sub Basin VWS} = \text{Gage} + \underbrace{\text{All CBCU} + \Delta S}_{\substack{\text{Computed Beneficial} \\ \text{Consumptive Use} \\ \text{+ Gain at Hardy}}} - \underbrace{\text{IWS}}_{\substack{\text{Imported} \\ \text{water supply} \\ \text{Credit}}}$$

$$\text{Main Stem VWS} = \text{Hardy Gage} - \sum \text{Sub-basin gages} + \text{All CBCU in Main Stem} + \Delta S - \text{IWS}$$

Roger - What trends does Marc see from his well irrigated acres values?

- Lee (a) 11.3 to 11.4" avg depth in U.R.N.R.D

(b) Recharge efficiency is not affected by acres, however if we were off on the furrow vs pivot on a county basis, that could be a problem

Efficiency

309% Gravity  
179% Center pivot  
169% LEPA

Roger - Dale Book does Barfield's Blaney-Criddle analysis for comparing to Nebraska

Lee - thinks he can make a 40,000 AF change in analysis

Roger - What about average year allocation scenario at 2000 level of develop, but may have to absorb 30,000 AF in future due to "lag" effect

Ann - NRDs are forgetting Roger's caveats of (1) 2000 level of development (acres & wells) & (2) ~30,000 AF in future GW depletions

- What do we want to tell NRDs about future planning for allocations in 2004

Lee - give NRDs estimates of allowable TOTAL AF umpage

① Long term compliance is independent of annual district wide allocation  
it should be done by a long term 10% reduction of pumping

② Short term compliance can only be accomplished by buy-outs or severe alluvial reductions and dry year leasing if money available. This would cause a substantial % reduction. Lee suggests an insurance fund @ \$1-2 per acre to get them through tough times.

1.75 million acres x \$1.50/acre = \$3,500,000 per year into bank for insurance

Lee Ann Roger

Tell 'em they got Derrell Martin's numbers for 1991-2000  
Acre-Foot pumped as broken down by NRD from his  
expert testimony.

{ upper 17% }  
{ middle 28% }  
{ lower 29% } → impact ÷ pumping

Then use <sup>may</sup> be 10% less than above Martin Estimates.

Politically we can sell this, but it still may not be enough,  
so the insurance plan will probably be necessary.

Marc will provide historical pumpage by NRD  
regardless of class.

Bureau considers 14" a full allocation