

## ADJUDICATION MEMO # 43

TO: Adjudication Staff Approved: NCY

From: Jeff Peppersack DBS

Date: July 27, 1995

Re: Irrigation Diversion Rate Calculations - Weighted Averages

This memo is notification of a change in our standard procedure to calculate irrigation diversion rates as described in the EVALUATION WORKBOOK FOR IRRIGATION DIVERSION RATES by Hubble Engineering, Inc. and Associated Earth Sciences Inc. This change will affect the calculation procedure described for Table 1 of the report.

Table 1 requires calculation of a weighted average for efficiency and net irrigation requirement based on acreages of each crop. These "summary" values are used in the next step which requires selection of the largest summary monthly value of net irrigation requirement to divide by the summary efficiency which results in the field requirement.

The change to this procedure is described as follows: After entering each crop's net irrigation requirement for each month (see Adjudication Memo #42), divide by the efficiency of the individual system for each crop. The result will be the crop's peak field requirement or the gross application amount for each month. Next, calculate a weighted average (based on crop acreages) of the gross application amount for each month. Select the largest summary value of gross application amount and convert to cfs/acre as described in the Hubble workbook.

A new spreadsheet has been developed to aid in the calculations required for Table 1 of the Hubble workbook (see example attached). This spreadsheet also incorporates the changes to the Hubble methodology described in Adjudication Memo #42. Average irrigation requirement values can be entered directly from the Allen and Brockway tables. Peak consumptive irrigation requirement values will be calculated automatically in the spreadsheet.

Please discontinue using all past spreadsheets using the old methodology. Copies of the new spreadsheet can be obtained from Jeff Peppersack.