

Notes on the Value of Edwards Aquifer Water
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Three quick approaches

1. Contacts with the Area conservation office of USDA/NRCS and Texas Soil conservation service (I don't remember their exact name) revealed that

Annual rental rates for irrigated acres range from \$90 to \$100 per acre for Medina county
Annual rental rates for dryland acres range from \$16 to \$25 per acre for Medina county
Thus the difference is around \$75 per acre.

When irrigated land is rented this typically involves provision of the well but no irrigation equipment nor any payment for water pumping.

Water use is around 2 acre feet per acre

Thus if the only difference is water access the value of water on an annual basis is \$37.50, ceterus paribus.

Now if one wants to buy the water how much would the value be if the annual payment is 37.50. well you divide 37.50 by the relevant interest rate. If we assume an interest rate of 6.5% the value of water is \$577 per acre foot. The first value I derive.

2. The Edwards Aquifer Authority recently bought water from farmers through a dry year "Irrigation Suspension Program" ISP. They paid, in anticipation of a dry year, about \$237 per acre. Average dry year water use in 2.4 acre feet per acre. Thus dry year water is worth \$100 per acre foot or when capitalized \$1,540 per acre foot for permanent sale. But that is dry year water. If this buyout was only done 1/3 of the time the cost per year again drops to \$513 again in the 500-600 range.

3. There are water trades going on in the lower Rio Grande Valley. Several years ago these were selling at about \$500 per acre foot. Today they have increased to a little above \$600.00.

If it was me I would use \$600 for a value.