Water farming pays handsomely

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Jerry Needham Express-News

The San Antonio Water System has been farming for water for almost 10 years and is now harvesting a bumper crop, saving its customers millions of dollars.

When state lawmakers in 1996 limited pumping from the Edwards Aquifer, it created marketable pumping rights. In 1998, SAWS bought its first of more than a dozen large irrigated farms just to add water rights to its inventory.

But as the price of those rights has skyrocketed, the investments have been far more lucrative than envisioned.

While keeping the land leased out to farmers and ranchers, SAWS stripped off the half of the Edwards pumping rights that legally can be converted to other uses. Now, it's installing efficient irrigation equipment to siphon off additional pumping rights that can be transferred to municipal use.

The utility closed on a deal Friday to sell one of the 13 farms to the highest bidder, and another closing was scheduled for Friday — and, you guessed it, the winning bids came in additional Edwards Aquifer pumping rights.

"It has been a super-sweet deal for this company," said Bruce Haby, SAWS' manager of corporate real estate.

The utility, which in the dry year of 2006 pumped 194,500 acre-feet of water, owns about 197,000 acre-feet of Edwards pumping rights and leases another 23,000. But that allotment is subject to cutbacks of up to 40 percent in severe drought, and the utility's long-term plan calls for buying another 35,000 acre-feet or so.

An acre-foot is 325,851 gallons, enough to supply the annual needs of three households.

When SAWS bought individual farms in 1998 and 1999 and a group of 11 from a single investor in 2000, the Edwards Aquifer Authority still was trying to determine who would get how much water, and it was believed that you needed to own the land to secure the water right, Haby said.

So the utility bought the 5,912 acres of farms just to get at the water. Now, pumping rights can simply be bought and sold on paper.

At that time, the right to pump an acre-foot of Edwards water each year in perpetuity was selling for anywhere from \$700 to \$900. Now, that right sells for about \$5,250.

The utility over the past two years has begun to outfit the farms with the highly efficient irrigation systems, taking advantage of Edwards Aquifer Authority rules that allow the transfer of conserved water to other uses.

SAWS has installed the equipment on two farms and contracted to put it on four more.

"The first farm we did was the Deluxe Farm out in D'Hanis, and the gentleman who leases it, Jerry Van Damme, has saved a ton of money just in diesel costs going from flood irrigation to center-pivot," said

Eddie Wilcut, SAWS' conservation manager. "He's increased crop yields, lowered his water consumption and greatly lowered his fuel costs associated with pumping."

Wilcut said installing the equipment easily pays for itself.

The cost for installing the center-pivot systems on the four farms is \$585,400, but the value of the 569 acre-feet of water that would be saved and transferred to SAWS' municipal stock is \$2,987,250. That means the utility would save \$2.4 million over simply buying those rights on the open market, Wilcut said.

Plus, installing the equipment leaves the farm more water- and energy-efficient, he said.

"If you look at flood irrigation, which has been the practice on these farms, that's only about 10 percent efficient," Wilcut said. "So you're going from 10 percent efficiency to 90 percent efficiency with a center-pivot irrigation system."

But the water flowing from the farm purchases didn't stop with the irrigation equipment. In October, SAWS put four of the farms up for auction for the highest bids in water rights. Three of the farms got bids, and SAWS accepted bids for two. The other two will go out for bids again, this time for cash, officials said.

The final figures on the utility's first farm purchase show it was a lucrative investment.

SAWS paid \$611,306 for the 322-acre Stinson Farm in Medina County in July 1998, gaining 350 acre-feet of transferable pumping rights. The utility paid \$90,800 for an irrigation system, allowing it to transfer another 184 acre-feet to municipal use. Then it sold the farm to Countywide Builders for a high bid of 143 acre-feet of pumping rights.

All told, the utility gained 676.4 acre-feet of municipal pumping rights from the Stinson Farm deal for a cost of \$702,106. Those water rights at today's prices are worth \$3.55 million.

Farming for water

The San Antonio Water System began buying irrigated farms in 1998 to add Edwards Aquifer pumping rights to its inventory. State law allows the transfer to other uses of half of a farm's Edwards rights, as well as additional amounts conserved through the installation of irrigation equipment. Following are the details of one transaction.

	MONEY INVESTED	
	Purchase of 322-acre Stinson Farm in July 1998	\$611,306
4	Installation of irrigation equipment	\$90,800
	Total investment	\$702,106
	WATER RIGHTS TRANSFERRED	
	Acre-feet of water rights transferred to municipal use after purchase	349.7
K	Acre-feet of water rights conserved by irrigation and transferred to municipal use	183.7
\$38	Acre-feet of water rights transferred to municipal use after sale	143.0
Acre-feet of water rights gained		676.4
V	alue in today's market (\$5,250 an acre-foot)	3,551,100
Source: San A	ntonio Water System	EXPRESS-NEWS GRAPH