

## DRIP IRRIGATION OFFERS NEW SOLUTION TO AN OLD PROBLEM

"Water is our limiting factor," says John Wilde. After an extended period of severe drought conditions, water has become an even more precious resource for this West Texas cotton farmer. "I live near the city of San Angelo and when my urban neighbors see a furrow filled with irrigation water, it's hard for me to convince them we're not being wasteful when the city was potentially going to run out of drinking water within 20 months."

Wilde's sensitivity to the water shortage prompted him, his two sons Douglas and Matthew, and wife Betty Jo, to begin changing irrigation practices on their 4,000-acre farm about seven years ago. While most of the operation consists of dryland wheat and grain sorghum, the Wilde family farms and irrigates approximately 850 acres of cotton.

The Wildes contracted with a custom operator to install the first 38 acres of Netafim drip irrigation in their farming operation, but John and his family have done subsequent installations themselves. "The first year we started with drip irrigation, our Netafim Dealer provided us with a crop consultant and also helped engineer the installation design," Wilde says. "It was day and night difference farming with drip irrigation versus traditional furrow irrigation."

Wilde credits the more efficient water delivery to the plant's roots with increasing yields of three to four times greater for both lint and cotton seed than what he had with more traditional furrow irrigation.

"Using Netafim driplines has been a wonderful advancement as there is no water evaporation from wind or heat," says Wilde. In fact, Wilde says that water loss is less than 10 percent. "We plant our cotton on top of the dripline and use GPS technology to position the dripline 10 to 12 inches below the root. You can start watering just as soon as you are finished planting. With drip irrigation, you can effectively use every drop of water." The farm depends on well water and surface water from reservoirs, as well as treated sewer water.

To expand the use of the drip irrigation, the Wildes took advantage of Natural Resource Conservation Service (NRCS) Environmental Quality Incentives Program (EQIP) funding that was allocated to the drought-stricken region to improve irrigation efficiency.

According to Wilde, the local NRCS soil conservationist assisted with some of the engineering. "The NRCS staff members also came back after we laid the dripline to help make sure we had it installed properly," says Wilde. "The cost-share program has helped us immensely in expanding the number of acres we now have irrigated with drip irrigation."

Wilde's family has been farming in Texas since 1845, however he said that his ancestors kept migrating West, "where they found better soil, but less water." That loamy soil, however, actually lends itself well to drip irrigation. "We don't water the entire field at one time, but rather water a certain number of zones that we can calibrate with our valve system, and then rotate after a period of time to another set of zones," says Wilde. "Each zone is designed to handle so many gallons of water. In two to four hours we can rotate to a different zone. With the loamy clay soil, you can bring the water to the top of the soil to allow for germination."

Wilde is a believer in the efficiency that a Netafim drip irrigation system has brought to his family's farming operation. "Cotton is our most important crop, and even in a severe drought, we've been able to improve production."

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INCREASED YIELDS
3 TO 4 TIMES MORE
THAN FURROW

