Ag Sense: Dairies efficient water users

There seems to be a misconception about how much water dairy farms actually utilize and their efficiency with this precious resource.

According to officials at the Office of the State Engineer, dairies account for only 1.3 percent of the state’s water usage. Yet, dairying in New Mexico produces more cash receipts than any other commodity, according to the National Agricultural Statistical Service officials.

Dairying generates $1.15 billion in annual receipts, more than 40 percent of the state's total.

Even in key dairy counties - Chaves, Roosevelt, Curry, Dona Ana, Lea and Eddy - water utilization by dairies never exceeds 3 percent of the county’s total usage.

An average dairy farm in New Mexico, with 2,000 cows, uses around 100 acre-feet of water per year. One acre-foot of water would fill a swimming pool 100 feet long, 50 feet wide and 9 feet deep. One acre-foot of water would irrigate one-fifth acre of turf grass on a golf course, or it could produce about 10 tons of corn silage or 13 bushels of wheat.

When used in dairy farming, that one acre-foot of water helps produce 42 million pounds of milk and other related products, with a value of around $18,000.

An average dairy in New Mexico that sits on a quarter-section of land (160 acres) uses about 7.3 inches of water per acre per year. As a point of reference for New Mexico, sorghum uses around 18 inches and corn about 30 inches per acre of water.

It can be argued that the demand for feed by dairy farms leads, in part, to increased forage production in surrounding areas and consequently to increased water utilization on those fields. During the last 20 years, as the dairy industry has bloomed in New Mexico, there has not been a significant increase in irrigated cropland acreage. Yet, there has been a shift of 20 percent toward irrigated forage and silage production, which may or may not use more water than other crops that would be cropped anyway in those fields. Dairy farming is just offering an additional niche market to local farmers.

In addition, current research in forage production is opening doors to new forage cultivars with substantially less water consumption.

Water utilized on a dairy is usually recycled multiple times: once to cool the milk; then to clean the milking equipment; then to clean the milking barn, after which, as much as 40 percent of it is used to irrigate forage crops for feed production.

The perception that dairies use large amounts of water is not true. Dairy farming is a great alternative for efficient use of scarce water.

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