

# NETAFIM DRIP IRRIGATION SUCCESS STORY

## ALFALFA



ROGER CORNWELL

### HIGHER YIELDS AND LOW LABOR COSTS WITH DRIP

"It's all about timing." That's how Roger Cornwell feels about many things - life, farming, and especially his drip irrigation system from Netafim. Cornwell, who is the general manager of River Garden Farms in Knights Landing, California, says that no matter the initial learning curve or install cost of drip irrigation, a grower just can't ignore the benefits.

"Sure, it takes some time to get used to the system(s) and get them operating at their peak, but just look at the yield returns and the low labor costs," says Cornwell. "It's just way, way, easier with drip."

Sitting at his desk surrounded by field maps and computer printouts, Cornwell chuckles when he reflects on his first install of a drip system - a small plot of alfalfa. He'd heard about the benefits of drip from other growers and attended a Netafim field day in the neighboring town of Woodland.

"I kept that first field pretty well hidden from the rest of the world," jokes Cornwell. "But when I looked at the figures and saw a four to five ton per acre yield increase, I knew drip was the way to go."

Today, Cornwell is steadily converting River Garden Farms' various fields to drip irrigation, with an eventual goal of being 100% drip irrigated - estimating an average return on investment of two to three years for each system. The plan is to rotate various crops through the fields utilizing the same drip systems. Cornwell notes that common problems like rodent intrusion or periodic repairs have not deterred him from reconsidering drip, because the benefits clearly outweigh any minor conveniences. Through Netafim's partnership with Ag Water Chemical company, he injects Protec-T<sup>™</sup> into the driplines and believes it helps to cut down on rodent damage.

Cornwell still floods his drip irrigated fields once a year to help with soil cracking and rodent control, but says that even with that annual application, he's using 3 to 4 acre feet of less applied water per acre each season when using in combination with his drip systems. Cornwell points out that since there are no ditches to manage, valves to shut on/off, or checks of water to change over, he's irrigating in shorter durations with more uniformity and frequency. Additionally, applying fertilizers through the system is simple and easily manageable.

"I just have more control over my irrigation with drip," says Cornwell. "Whether it's timing of irrigation or use of fertigation, there's so many 'what ifs' that get taken out of the equation."

Whether it's corn, sunflowers, tomatoes, alfalfa or melons, Cornwell is excited about the endless possibilities of drip irrigation and higher yield returns. His enthusiasm has even led him to experiment with a 30-acre trial of growing rice on drip irrigation, a crop that has historically used flood irrigation. Flood irrigation helps to recharge groundwater, however a portion of the water is subject to loss through evaporation. Given the depth that drip irrigation is buried into the soil, groundwater recharging can still exist while serving the plant with its moisture needs and curtailing evaporation. River Garden Farms' depends completely on surface water delivery and drip plays a critical role during seasons of drought.

"The drought is something is very real, even if you're in Northern California," notes Cornwell. "We all need to do our part, and I think adopting technologies like drip are viable solutions that make good business sense."