System cuts irrigation cost

By **LEN WILCOX**

THE PureSense Irrigation Manager, one of World Ag Expo's top 10 new products for 2008, provides numerous solutions for not only remote monitoring, but also remote management of crops. Customers report a return on investment of up to 400% in the first year. The company is so sure growers will be happy with the system, it will buy the system back at the end of a year if growers are not satisfied.

One major cost savings is in water management. By monitoring soil moisture at the roots, the system knows exactly how much water is being delivered to the plant — and the computer software knows how much water the plant needs, so the grower knows exactly how much irrigation is actually needed.

Water steering wheel

Matt Angell, vice president of sales for PureSense, is a grower and user of the product as well as its chief advocate. The irrigation specialist has designed several systems in the Central Valley.

NRCS PHOTO

BETTER OPTION: PureSense is an alternative to the old-fashioned method of wet ball irrigation decision making.

Key Points

- PureSense can offer a return on investment of up to 400% in the first year.
- Intelligent software evaluates data to help make decisions.
- PureSense lowers irrigation costs and helps grow stronger plants.

"We were building these tremendous irrigation systems and not giving the grower a steering wheel," Angell says. "The PureSense system is the answer to that. It not only gives you the raw data, it provides solutions. It is intelligent software that analyzes the information to help growers make decisions."

The PureSense system collects soil moisture data, weather data or irrigation pump data and relays it to the company's Web site where the grower has access. The data is transmitted by cell phone every 15 minutes, so it is virtually real-time information. The monitoring station, complete with a minicomputer, sensors, and cell phone or radio, is battery powered with a solar charger.

"Our sensors won't just tell you the tank is half full," notes Angell. "It will tell you when the tank will be empty based on your rate of usage. If there's a pressure drop in a line that's being monitored, it will tell you that, too, so you are alerted to problems in the field."

Angell says the software is user-friendly and has the intelligence to be of real assistance. "Growers aren't looking for more data; they are looking for solutions — when should I do what and how much needs to be done. We offer that information in an easy-to-use format."

While reduced irrigation costs are an immediate benefit to accurate monitoring, PureSense offers other benefits.

AMPLIFY EFFICIENCY: Drip irrigation is efficient because it delivers a small amount of water over a long period of time. PureSense boosts efficiency by delivering water when the crop needs it.

"The right amount of water at the right time builds stronger plants. This reduces the need for pesticides and fertilizers," says John Williamson, director of business relations for PureSense.

"We are working with growers of vegetables, grapes, nuts and other crops to help optimize the health of their plants. We provide growers with an easy way to plan and manage irrigation and avert potential threats to plant health," Williamson says. "Our growers not only see improvements in crop quality and yields, but also gain consistency in yields, year-in and year-out."

What it costs

PureSense is a turnkey system that includes installation and a one-year agreement for maintenance, monitoring, and Internet access to the company's software and the grower's data files. The basic unit costs $3,860, including the soil moisture probe. Weather stations are $850, and other remote sensors for monitoring irrigation are available.

After the first year, the company provides system maintenance, repairs and computer access for $850 a year.

Wilcox is a Sanger writer.

FIELD SCRUTINIZER: PureSense monitors the temperature and humidity above and within the canopy.

Ag, environmental lawyer to lead ANR

By **LEN RICHARDSON**

THE University of California Regents appointed Daniel M. Dooley, an agricultural and environmental attorney with extensive experience in California, to head UC's statewide ag and natural resources programs, effective Jan. 2.

As systemwide vice president for UC's Division of Agriculture and Natural Resources, Dooley will lead a statewide research and public service organization responsible for activities in ag, natural resources, environmental sciences, family and consumer sciences, forestry, human and community development, 4-H/youth development, and related areas.

"For more than a century, the university has provided farmers and ranchers with the cutting-edge research and new technology they need to stay competitive in national and international markets," says Wyatt R. Hume, UC provost and executive vice president for academic and health affairs. "Together, we have introduced some of the most progressive, sustainable and environmentally friendly agricultural practices in the world to supply safe and abundant food. Dan Dooley's leadership and experience will help sustain and strengthen this relationship between California agriculture and the University of California."

The program

ANR programs and services, including Cooperative Extension and the Agricultural Experiment Station, are located on UC's Berkeley, Davis and Riverside campuses and in more than 50 regional and county offices throughout the state, with nearly 1,000 faculty, specialists and advisers, and an annual budget of $300 million, including $117 million in state funding.

"I am deeply honored to be selected as vice president for Agriculture and Natural Resources and appreciate the university's confidence in my ability to lead the premier agricultural research and Extension system in the nation," says Dooley. "UC is uniquely positioned to enable California to continue to lead the world by finding new opportunities and solutions to the most pressing issues facing agriculture, consumers, the environment, natural resources and our youth."

Dooley has a long relationship with UC and the ag community. He has held leadership positions in local, state and national agricultural organizations, as well as with the university. He previously served as chief deputy director of the California Department of Food and Agriculture (1977-80) and chairman of the California Water Commission (1982-86). He has chaired both the UC President's Advisory Commission on Agriculture and Natural Resources and the UC Agricultural Issues Center's advisory board, as well as served as UC representative on the Council for Agriculture Research, Extension and Teaching, a national grassroots organization of land-grant universities.

National service

Dooley currently is a partner at Dooley, Herr and Peltzer LLP, a Visalia-based law firm specializing in agricultural, environmental, business and water rights law. He has successfully bridged environmental and economic considerations in a number of controversial legal issues, including the recent settlement of protracted litigation regarding the restoration of the San Joaquin River, the reintroduction of salmon and the main-