## Water, Water... Water...

NO MATTER IN WHAT REGION THEY'RE LOCATED, MOST ALL GOLF COURSES FACE SOME KIND OF IRRIGATION ISSUES

## In the **WEST**,

BY LARRY AYLWARD, EDITOR IN CHIEF

**YOU HEAR IT OFTEN:** The West is running out of fresh water. Consider California, where many areas of the state import water from other places, such as Lake Mead and the Colorado River. But those supplies are diminishing.

Alas, what does the future hold for golf courses in a region that's drying up?

Mike McCullough, director of environmental and water resources for the Northern California Golf Association in Salinas, Calif., says golf course superintendents and other golf industry leaders better start thinking about the future of their water use or their won't be a future.

"You'd like to think people are thinking about it long term, but chances are they're not," McCullough says, noting that while areas of northern California receive up to 15 inches of rain a year or more, most of Southern California receives much less.

The passage of a bill in November by the California legislature will surely get them thinking about the future. It calls to reduce water use statewide by 20 percent by 2020. Groundwater supplies will be measured across the state for the first time. "Is this ideal? Absolutely not," McCullough says. "Is turf going to suffer? Yes."

But the good thing is the bill will stimulate thinking of how to save water, McCullough adds. "I've been encouraging people to start this kind of dialogue," he says.

For instance, maybe golf's leaders in California should talk about whether it's sensible to grow cool-season turf in areas that are consistently 100 degrees Fahrenheit during the summer.

"Could you get by with a species

## a Need to Keep an Eye on Every Drop Used

It's also possible to run out of

that requires less input, less maintenance and less water, yet still be desirable?" McCullough asks.

Recycled water use is a good answer for golf course irrigation in California and other parts of the West. But it's not *the* answer. There are infrastructure issues and turning a recycled water plan into reality could take years.



recycled water. Just ask Justin Ruiz, the certified golf course superintendent of the Rim Golf Club in Payson, Ariz. Ruiz uses it to irrigate at the Rim, and it's not uncommon for the club's irrigation lakes to drop to a 30-day supply of water for irrigation. As a superintendent, Ruiz says, you're forced deal with it.

How does Ruiz deal with what seems like a constant challenge of having enough water with which to irrigate? "We know exactly how much water we're using at night, and we also measure how much water we put out by hand-watering," Ruiz says.

Why doesn't Ruiz have an abun-

dance of recycled water with which to irrigate? "We have a small town," he says of Payson, which is about 90 minutes north of Phoenix. "Because of the down economy, more people have left town. Because there are fewer people, less water is used."

McCullough believes California will blaze a trail toward water conservation. The state's new water legislation is the beginning of just that.

"Water use will be more transparent and there could potentially be a formula for how much you get," McCullough says. "If you exceed that amount, there will be heavy fines and you'll be the scorn of the community."

## Forecast in the **SOUTH** Calls for More Effluent Water Use

BY LARRY AYLWARD, EDITOR IN CHIEF

**TWO YEARS AGO**, the Southeast experienced its worst drought in a century. Mark Esoda, certified superintendent of the Atlanta (Ga.) Country Club, remembers the drought well.

Last September, the Southeast experienced unprecedented rainfall. Atlanta was saturated for nearly a week, with some areas of the city receiving 5 inches of rain in 13 hours. Esoda remembers that weather phenomenon well, too.

"The lakes are full, and nobody cares about the drought anymore," Esoda said in October. "The Atlanta area has already surpassed its annual rainfall mark."

Climate change? Call it what you will.

No matter, water availability will continue to be an issue in Atlanta and the South, Esoda says. And much of it is because of the wacky weather.

"Right now, water availability is good but outdoor water-use rules will continue to be developed even though there is plenty of water," Esoda says.



In Florida, Rob Kloska, superintendent of the Jupiter Island Club in Hobe Sound, says availability is the biggest water issue there, especially for new golf courses. Kloska says the first questions asked to developers are: Where will you get the water, and do you have access to effluent sources?

Kloska has irrigated his course through a reverse osmosis treatment plant since 1998. Reverse osmosis is the process of extracting salt and other minerals from brackish salt water and converting it to irrigation-quality water. Kloska says Jupiter Island decided to build the \$1 million reverse osmosis plant because of soaring potable water costs and water *Continued on page 36*