

Understanding water's worth

Civilization, traces mankind's dependence and use of water — from the first ancient, irrigated agrarian civilizations in the Middle East's Fertile Crescent to the rise of the United States as a global superpower. He makes the point that the economic dominance achieved by our society in the 20th century can be attributed, in no small part, to the abundance and productive use of our freshwater resources.

Accounting for approximately 6% of the world's population, the United States and Canada are blessed with a disproportionately large supply of its available fresh water. We use this precious resource to drive turbines in our massive dams, and for cooling and producing electricity in our power plants producing enormous amounts of energy that we parlay into industrial production. We use water from our rivers and our aquifers to make deserts bloom into gardens and to transform prairies into massive grainlands.

Who can dispute that much of California's incredibly productive agriculture industry is a gift of the Colorado River, while huge farms in our Plains states, one of the world's top grain-producing regions, owe their productivity to water drawn from the massive Ogallala Aquifer.

The best new source of water to meet our future needs will be the water we save now.

BY **RON HALL**
EDITOR-AT-LARGE

WAS A SOCIETY, and especially those of us in the Green Industry, are starting to comprehend water's true worth. While we have a long way to go, we now realize that we must do a better job of preserving water quality and conserving our freshwater resources. We're becoming aware of the irreplaceable role of fresh water to our society's economic vitality and to the health of our Green Industry.

Author Stephen Solomon, in his recently published book, *Water, The Epic Struggle for Wealth, Power and*

But there's a price to pay for drawing upon this bounty.

We're now faced with an overdrawn Colorado River, shrinking aquifers and, in the case of some of our fastest-growing regions, grossly inadequate water storage capabilities and crumbling infrastructure. Apart from providing our drinking, cooking and sanitation needs, the lack of an ample and reliable supply of fresh water threatens the economic base of our nation and, of course, our industry.

Few cities in the United States know this better than Atlanta, the Southeast's economic powerhouse that suffered a four-year drought that ended in the winter of 2008-09, ironically (and perhaps predictably) with flooding.

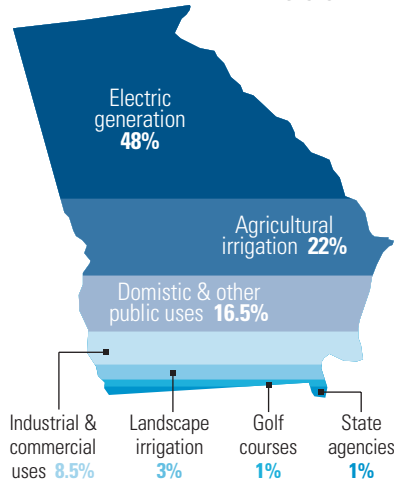
Atlanta's huge challenge

You can't be blamed for wondering how a region that averages 50 in. of precipitation annually (compare this to the 4 in. annually in Las Vegas) can end up with just a few months supply of drinking water during the height of its recurring droughts, a huge problem considering the region's 5 million people. The short answer: lack of storage.

You also can't be blamed for being curious as to why Atlantans pay more for water than people in any other large American city — 108% more than New York and \$144 more than

GEORGIA WATER USE

BY SECTOR



Source: The University of Georgia Cooperative Extension

San Antonio, TX. The answer again is simple: the \$4.1 billion price tag for upgrading the city's antiquated water and sewer system.

North Georgia's water issues, which the state is now belatedly attacking, offer a stark example of lack of foresight, planning and, perhaps, political will in securing water to meet future economic growth and development. And yes, Georgia, like much of the rest of the United States, will continue to add people, homes, industries and businesses.

Meanwhile, the amount of available fresh water (at least at an affordable cost) will remain constant or, in some regions, become even more stressed.

"We know we have to start construction now and plan for future droughts," says Dr. Mark Risse, professor and coordinator of Extension Engineering, University of Georgia. And, says Risse, future droughts are inevitable, ticking off the list of those plaguing Georgia during the last 30 years (1981, '86-'88, '98-'02 and '06-'09), the period of the region's explosive growth and development.

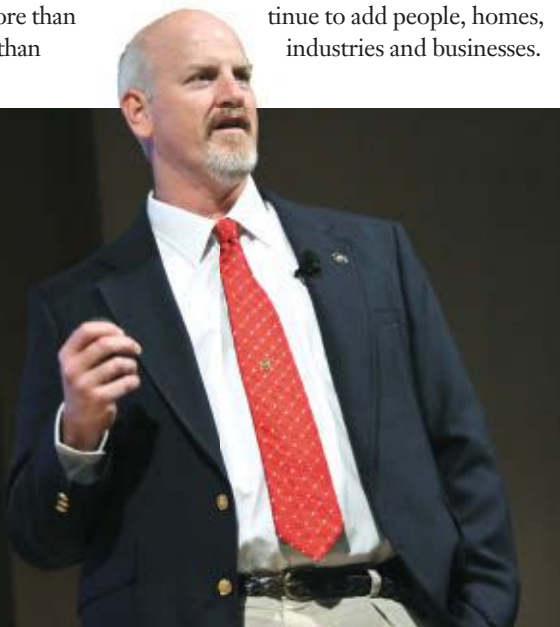
It's unlikely Atlanta will soon be getting a significant new source of water storage in the form of a reservoir. The cost and the time it takes to perform environmental studies and obtain necessary permits will see to that. The region's best — and likely, only — source of new water will be the water it saves through conservation.

Risse says that adoption of the State Water Plan in February 2008 ignited a flurry of activity to alert Georgians to the very real need to use water more wisely. These include programs directed specifically at the landscape industry such as:

- ▶ Implementing educational programs for customers;
- ▶ Offering customers checklists of practices and processes for certifying water-efficient landscapes; and
- ▶ By 2012, recommending standards for design, installation and maintenance of irrigation systems and certifying landscape professionals.

Is Atlanta doing enough to secure its water future — the key to its continued economic growth? Are the rest of us?

Maybe or maybe not. But the example set by new development in the region, projects such as the remaking of Atlanta's Lovett School campus (featured on page 19 in "Water Lessons") shows that we're aware of our water issues and taking steps to meet them. **LM**



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