

Christopher P. Hill



Compiled by Amy McIntosh

# Water Action Items

Conservation & reuse practices help secure future water supply

**L**imited budgets, coupled with soaring population rates and aging infrastructure, have forced utilities to address many different issues at once. Christopher P. Hill, senior associate and Florida water technical leader for Brown & Caldwell, shared his perspectives on the future of water supply and ways to help secure it.

**Amy McIntosh:** What are some of the most pressing issues facing the nation's water supply?

**Hill:** I think the economy is still the issue most affecting our nation's water suppliers. Aging infrastructure and limited capital budgets are other significant issues. There is a need to more effectively manage the water supplies we currently have and to develop more sustainable alternative water supplies. These alternative water supplies might be traditional sources of drinking water—groundwater, surface water and seawater—or they may be a means to extend current drinking water supplies.

For example, storm water augmentation of reclaimed water supplies for irrigation can extend reclaimed water service and reduce the use of potable water for irrigation. I also think it is only a matter of time before we see the first direct potable reuse application in this country. The technology is available and there will either be an economic incentive or a regulatory incentive to do so. At this time, it is simply a matter of getting the public over the “yuck factor.”

**McIntosh:** How do you propose the public gets past this “yuck factor?”

**Hill:** Proactive public education—resulting in an understanding that potable reuse produces a product that can be of equal or better quality than conventional drinking water sources and may be done for less cost and with less impact to the environment compared with other alternative water supplies—is essential to getting over this hurdle.

**McIntosh:** How can utilities improve their distribution systems?

**Hill:** There are a number of factors that influence distribution system water quality. Infrastructure condition is one of them, but, given current economic conditions and magnitude of the issues, it's not one that is going to be solved overnight. That said, I think routine flushing and strategies to reduce distributed water age are likely to provide the most benefit for the least cost. Elimination of dead ends, improving

storage tank mixing and turnover, and other strategies to minimize water age may even reduce the need for flushing in many cases. Periodic flushing is necessary to remove biofilms and sediments that accumulate in the system, but if it can be minimized, water can be conserved.

**McIntosh:** What measures can water agencies take to protect water supplies?

**Hill:** Conservation and reuse are the norm in most of Florida. Not only is it environmentally responsible, but it helps extend lower-cost freshwater supplies. Toilet rebate programs and high-efficiency washers and similar programs can be effective, but I think the most effective forms of conservation have been public access reuse and public-private partnerships involving industrial reuse.

**McIntosh:** Why are some states more in tune with water conservation and reuse practices than others?

**Hill:** I think it's been a matter of necessity in those states. Most of the areas that have effective, well-established conservation programs in place have been facing water availability issues for years. It has been a means to squeeze every last drop, if you will, out of existing supplies. That said, with the recent drought in the Midwest and seemingly more frequent extreme climatic events, I expect conservation and reuse to begin to play a more prominent role in water supply in areas of the country that may have not given them a second thought previously.

**McIntosh:** Why should water agencies consider developing alternative sources of water supply in the future?

**Hill:** A well-balanced water supply is more sustainable and has less impact to the environment. The Tampa Bay region is a perfect example of that. Twenty years ago, the region relied almost exclusively on groundwater. We saw significant impacts to wetlands and groundwater quality as a result. Today, the region utilizes a healthy blend of ground water, surface water and seawater. **www**


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News Briefs compiled by Amy McIntosh

## Clean Water America Alliance Announces Name Change, New Network

 The Clean Water America Alliance announced it is changing its name to the U.S. Water Alliance and has formed a One Water Management network, both reflecting the organization's core mission.


“The Alliance's mission—uniting people and policy for ‘one water’ sustainability—remains the same,” said Alliance President Ben Grumbles. “Our new name is easier to remember and more closely aligned with the integrated ‘one water’ vision we're working toward in watersheds and communities across the U.S.”

## Demand for Water Treatment in China to Exceed 46 Billion Yuan in 2015

 According to a report from the Freedonia Group Inc., the market for water treatment products in China is expected to grow more than 10% per year to 46.6 billion yuan in 2015.

Demand for water treatment products in the industrial sector is projected to grow 11% annually through 2015, accounting for more than half of the water treatment market in China. The municipal water treatment market is projected to grow 8.8% annually, due in part to the continued expansion of the nation's water supply and wastewater treatment infrastructure.

## U.S., Canada Sign Amended Great Lakes Water Quality Agreement

 U.S. Environmental Protection Agency Administrator Lisa P. Jackson and Canada's Minister of the Environment Peter Kent signed the newly amended Great Lakes Water Quality Agreement at a formal ceremony in Washington, D.C.

New provisions to the agreement address aquatic invasive species, habitat degradation and the effects of climate change, and support continued work on existing threats to people's health and the environment in the Great Lakes Basin such as harmful algae, toxic chemicals and vessel discharges.


## GWJ Report: Water Risk Drives Market for Desalination, Reuse

 A Global Water Intelligence report indicated the use of desalination and reuse technology among industrial water users is accelerating, with double-digit growth rates expected

over the next five years.

The report, titled, “Industrial Desalination and Water Reuse,” suggested that capital expenditure on industrial desalination and water reuse technologies will grow from \$2.8 billion in 2011 to \$5.7 billion in 2017, due to a rising awareness of water risk and the role that technology can play in increasing productivity.

## Godwin Distributes Pumps to Areas Affected by Hurricane Isaac

 Godwin, in conjunction with distributor Better Pumps & Solutions, deployed a total of 167 pumps to areas of Louisiana affected by Hurricane Isaac. The 6-in. pumps were deployed from branches in Texas, Florida, New Jersey and Wyoming.


The company also deployed nine pumps from Hydra Service to affected areas in Mississippi, allowing construction of an emergency spillway at the Percy Quin Dam and Lake Tangipahoa to begin.

## Report Estimates Global Water Utilities Industry to Reach \$432 Billion in 2017

 Improvements in global economic conditions and increasing environmental concerns due to water pollution from the industrial and agricultural sectors are expected to drive growth in wastewater and sewage treatment markets across the globe, according to a Lucintel report titled, “Global Water Utilities Industry 2012-2017: Trend, Profit and Forecast Analysis.”

The global water utilities industry revenue is forecast to reach an estimated \$432 billion in 2017 with a CAGR of 4.2% over the next five years.

## GIS Technology Use Expected to Increase

 Findings from Pike Research indicated that spending on geographic information systems (GIS) services, software and tools will increase steadily over the next five years, reaching \$3.7 billion in 2017.

According to the report, GIS is a foundational technology linking every activity of an electric utility—including design and construction, asset management, workforce management, outage management, and real-time grid operations.

## Networking News

- Tony Thill was named president of CST Industries Inc.'s division CST Intl.
- Mark Lambert was appointed CEO of IDE Americas.
- Rene Gamero was hired by StormwaterRx LLC as the southwest regional manager.

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