



Water Supply Faces a Sea Change

Many of us in the United States see water all around us and think of it being as common as air. But even where water might be most abundant, using it may pose problems. Elsewhere, the difficulties often rise to the level of crisis. All in all, the state of water today suggests investment opportunity for potential solutions.

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In one form or another water has been a leading part of the news for much of 2015:

- Crippling blizzards buried the New England coast.
- Punishing drought is frying the California farm belt.
- Deadly floods have surged across the Texas plains.

But those headlines have all been about dislocations caused by water that was in the wrong place at the wrong time. Turn it around and look at water in the right place at the right time; you may find not disaster, but investment opportunity.

Water as an Economic Force

Even as sea levels inexorably rise, fresh potable water is becoming a scarce commodity in many places. No matter what the weather may do, demand for fresh water is expected to surge under the pressures of growing populations, public health improvement, and significant changes in food consumption and agriculture.¹

Moreover, worldwide, billions of people are already making do with more or less permanent water shortfalls. Agriculture represents more than two-thirds of global water consumption, with meat production requiring up to five times the water used for obtaining comparable nutrition from grain. Given that two-thirds of people live where water supplies are scarce, the mismatch between supply and demand is significant and increasing.¹ This misalignment clearly creates public policy issues, but it may also offer potential investment opportunities as well.

The Business of American Water

Water supply in the United States is a highly fragmented business, according to an analysis by Standard & Poor's. Local government agencies and government-chartered authorities gather and deliver the vast bulk of the water to consumers, supplemented by 10 publicly traded firms and approximately 16,500 privately held, investor-owned entities. Private firms operate more than 2,400 municipal water and wastewater facilities. This last number is expected to grow significantly in the years ahead as small and thinly capitalized local entities seek economies of scale and the financial wherewithal to address future needs.²

These needs are projected to be considerable. Overall, the U.S. water industry

generated revenues of about \$151 billion in 2013, the most recent year for which data were available. Against that revenue base stands infrastructure needs requiring an additional investment of around \$1 trillion during the next quarter-century. In addition, an investment of more than \$300 billion would be required over the next 20 years for sewage collection and treatment to keep existing raw water supplies (lakes and rivers) safe and clean, according to Standard & Poor's.²

The Business of Foreign Water

United Nations' data suggest that three-quarters of a billion people do not have access to clean water today. Given that this problem is concentrated in the arid regions of North Africa and Central Asia, solutions are likely to involve complex and costly construction and engineering projects. Many of the most affected areas share the same limited river and lake systems, suggesting that solutions will require more inventiveness than pipe, dam, and reservoir construction. One such possibility is desalinization. Annual spending on desalinization projects worldwide is projected to increase from \$10 billion today to \$16 billion by 2020.²

For Us to Think About

World events are often unpredictable as well as unsettling. Up until 1973, for example, the price of energy was often merely an afterthought. Then, OPEC gave the market a sharp kick. It triggered an economic crisis but also spawned waves of innovation that transformed many industries. Investors who rode those waves profited handsomely.

Global water supply may be on the verge of similarly sweeping change. Countries around the world face revolutions of rising expectations which will almost certainly require greater water consumption to quench. Meanwhile population keeps growing and climate change may shift balances of supply and demand.

No one can tell for sure how these factors will play out for investors. But those who look closely at the potential rewards and risks may find that the uncertainties of water may foster new business and investment opportunities.

¹United Nations Educational, Scientific, and Cultural Organization (UNESCO), [UN-Water factsheets](#), retrieved June 2, 2015.

²Standard & Poor's Capital IQ Industry Surveys, *Environmental & Waste Management*, October 2014.