

Environmental/Water Management Update

2/9/2011

A Murky Future

Our world will face many challenges in the future including energy shortages and environmental issues. One such challenge, which many take for granted but will have a significant effect on all aspects of life, is clean water. H₂O is one of the most abundant substances on Earth, yet only about 2% of it is fresh water, only 30% of fresh water is easily accessible (in the forms of lakes, rivers, and ground water)¹. As populations keep growing, demand on already stressed fresh water reserves will increase, possibly causing public unrest.

Most water management is currently regulated by government entities; however, one growing trend across the globe is a move towards privatization of waste water and water purification management. With local and federal governments falling short on the task of maintaining an ever-changing infrastructure, many are turning to the private sector to relieve the burden.

Global Fresh Water Stress Levels

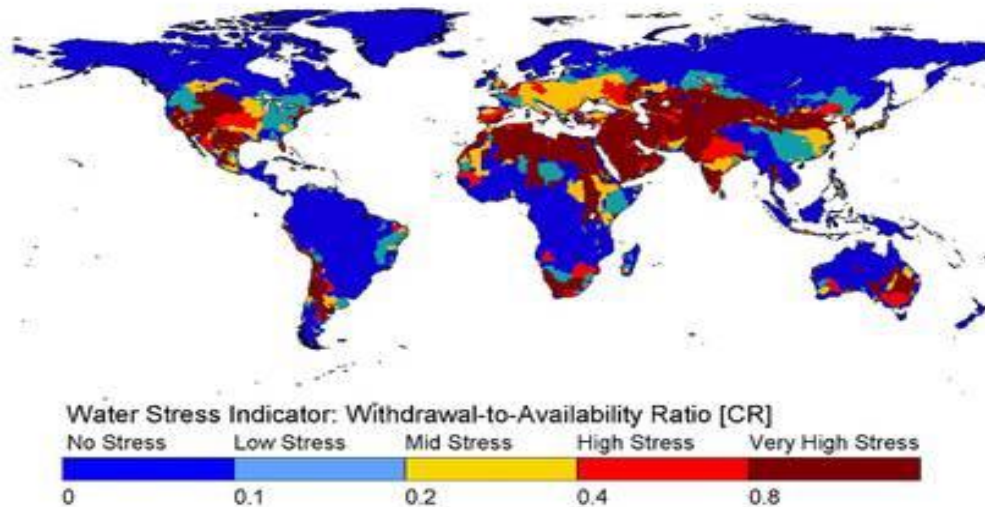


Figure 1:

Note that the areas of high-very high stress on its regions water supply are not all desert and arid regions. In addition, many of those regions carry large cities and high populations that source their water resources from other locations at a premium costs. Others are working with companies in the private sector to find solutions utilizing new pipeline and desalination technologies to bring down cost.

The Strengths of Privatization

The most compelling argument for movement away from government regulated water management utilities is the government's inability to maintain often outdated equipment that is prone to failure, driving utility prices higher to fuel repairs. Private companies specializing in this industry would bring the newest technology and know-how to a region, providing positive results, and reliable clean water for consumer use. Expansion of the private utility industry would also, in many cases, generate new jobs in maintenance and specialist regarding the new technologies employed.

Additionally, after a lease is signed, it would create a monopoly for the lease period, but the monopoly would be subject to a bidding structure, forcing companies to bid competitively to win contracts. During the bid period contracts and price agreements can be arranged to be acceptable to the inhabitants of the region.

A final strength of privatization is the philanthropic side of many major corporations. Utilizing their vast resources, they often attempt to give back to the environment and societies around them in the form of taxes paid or green projects targeted toward sustaining the local water table.

¹ http://www.globalchange.umich.edu/globalchange2/current/lectures/freshwater_supply/freshwater.html

² <http://www.worldwatercouncil.org/index.php?id=25>



Privatization Concerns

Globally, private water management has grown into a \$300+ billion dollar industry³, and looks to double in capacity in years to come. Even with a strong growth pattern, many states, countries, and local governments have concerns about turning the reins over to an entity needing to make a bottom line. The water bills paid to government-run utilities are typically reinvested in the utilities infrastructure to ensure maintenance and the compensation of those running the system. Yet if the utility is privately owned, in efforts to maximize profit they may use the water resources in other ways. Uses may include selling water reserves to soft drink manufacturers or water deprived regions, possibly causing stress on the source regions water supply as well. To ensure this scenario does not occur, leasing contracts are being arranged, including property rights and co-management arrangements.⁴ These arrangements help prevent total monopoly situations, and often set up management timeframes to ensure a change can be made if needed.



Figure 2: Artist rendering of Saudi desalination plant

Is water the new oil?

As demand grows along with population, more and more utility contracts and large water reservoirs are being purchased or leased by water management companies. In addition to positioning themselves in water-rich areas of the world, private sector companies are also lending their services and cashing in on the water deprived regions in the form of desalination plants. Veolias of France, GE Water & Power, and Suez Environment all specialize in desalination plant construction and management in addition to their water management expertise, making them among the top players in the industry. Construction of one of the largest desalination plants in the world was recently completed in Saudi Arabia. The plant was constructed in a joint venture with contributions from GE, Veolias, and Hyundai Heavy equipment.¹ The plant is capable of producing 800,000 cubic meters of water an hour, and can support over half of the country's water needs.¹

By straddling both sides of the market, multinational corporations such as these build brand equity and position themselves to be the go to group in the event of water shortages. With the future unclear in terms of the environment and energy consumption, one certainty is the need for clean water. This ever-growing industry has opportunities at smaller municipal levels to build up into large regional or national competitors. The technological barriers to entry are based more on scale and cost rather than proprietary techniques, and a chance to thrive as a supplier or in a niche is ever present.



Fletcher/CSI Insights

In the ever-changing global economy circling so precariously around the environment and energy, any newcomer or long time stalwart of the water management industry from the private to the public sector will need to monitor the industry. Fletcher/CSI can help keep your company current with industry changes and, by doing so, help your company adapt and expand its knowledge base on current acquisitions and technological breakthroughs. Understanding the changing landscape of the industry will be imperative in creating future strategies to best position your company moving forward. Fletcher/CSI's General Practice Group conducts extensive analysis and monitoring of the major players in the water management sector as well as the companies and suppliers who support them. Using Fletcher/CSI will provide your company with a trusted advisor poised to help you make better decisions through insightful intelligence.

³ <http://www.waterencyclopedia.com/Po-Re/Privatization-of-Water-Management.html>

⁴ <http://www.indigenouspolicy.org/ipjblog/?tag=Water-Allocation>