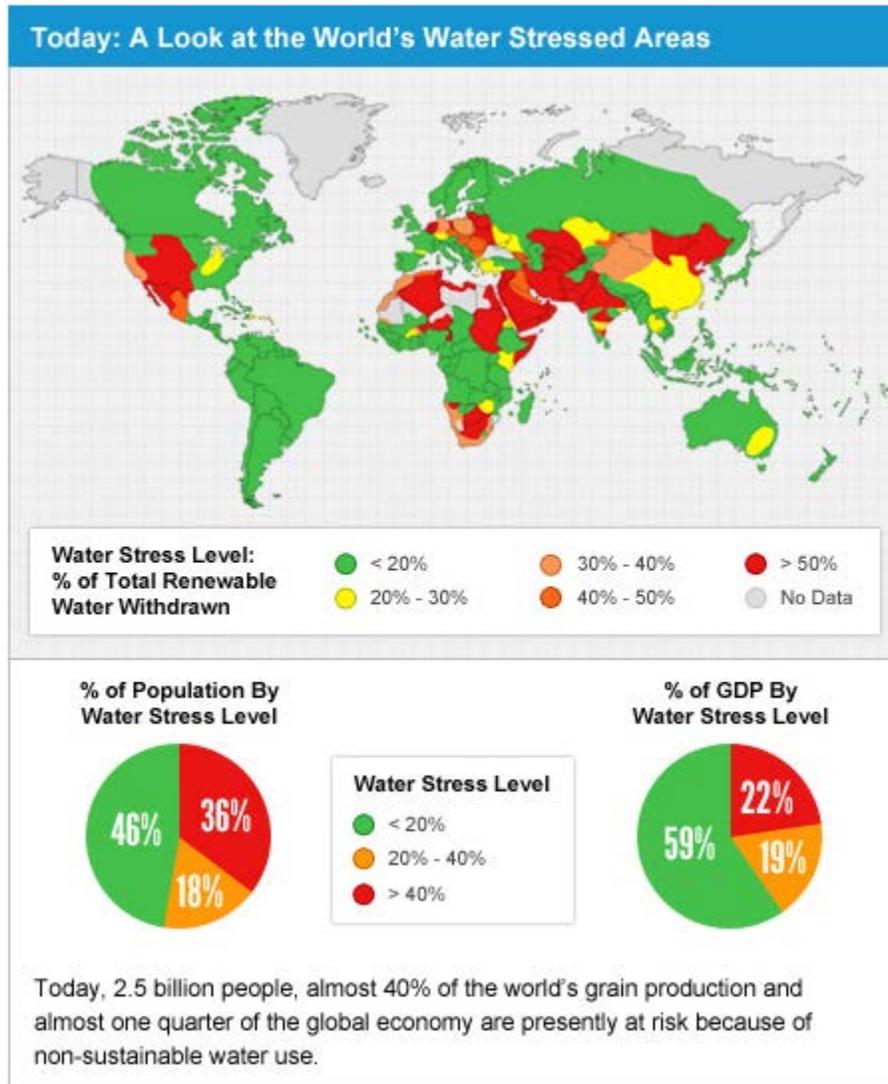




The Unglamorous, But Essential World of Water

Imagine being told it is now against the law to turn on your faucet five out of the seven days in a week. A preposterous thought to most, but a potential reality to millions of residents of Sao Paulo, Brazil if their current drought conditions persist. Now let's bring this scenario closer to home; as we are aware, California and the American West have been battling water scarcity issues for many years. In the case of California, a combination of the lack of rain, a decline in snowfall, a large population and the fact that the state's farmers produce two-thirds of the country's fruits and vegetables, has created what is now a four year drought. If you take the situation in the U.S., a relatively new phenomenon and one being addressed by a first world nation, and add all the people and businesses globally that require potable, sanitary water, what we have is a crisis the World Economic Forum considers to be the decade's number one social and economic risk. The United Nations predicts that between 2010 and 2050, 3 billion more people will need access to drinking and wastewater management services; meanwhile 250 to 500 million square meters of water are wasted each year.

Turning back to the U.S., eighty percent of California's water is used for agriculture, which, in 2014, meant the drought cost farmers \$2.2 billion through lost crops and increased water costs. Unfortunately, these profit losses were not felt equally across producers given the rather antiquated system of water rights in that part of the country. Essentially, those who first dug channels to divert water to their property many decades ago, still get their water first, while those with more junior rights have been asked by the state water board to curtail their water usage in 2014 and likely will again in 2015. Taking this one step further, given the need for water, cities like L.A. plan to spend \$71 million to buy water rights from owners with less need or from those driven by profit. Even more extreme was the recent announcement by California's governor to force urban water agencies to reduce their usage by 25%. Given these two examples and many others not cited, what appears to be occurring is more of a band-aid approach to resolving a supply/demand issue that is not only secular in nature, but that will likely get worse as the global population grows.



Source: growingblue.com/water-in-2050/

This is not say to that the innovation isn't there or being developed in order to build, replace, and improve the infrastructure and efficiency of water usage. In fact, aging water infrastructure is one of the EPA's top priorities right now, and as well there are many companies globally that focus exclusively on water innovation. What does appear to be missing is incentive. Currently, according to how water is priced and sold today, there is no sense of urgency in terms of the notion that demand is outweighing supply. Water is cheap; it does not cost much to maintain a constant flow of water to a home or business. Often the cost to deliver water is not fully covered by the usage fee, nor is the cost of depreciation or R&D reflected. A glaring example of this is in a place like Sacramento, CA, a city struggling to keep up with its water demand, where about half of the residents do not have water meters associated with their homes and instead pay a flat rate regardless of usage. As of 2013, more than 235,000 homes and businesses in the state of California are not equipped with



water meters. Moreover, a city like Boston, which receives greater than 40 inches of annual rainfall, pays \$78 a month for 400 gallons of water a day, while in Fresno, CA the same amount only costs \$28. In terms of a California farm, in-line with the state's system of water rights, if a farm does not use its allotment of water, the access may be taken away the following year, which discourages any attempt to save or use the resource more efficiently.

Today, the scarcity of potable water is an issue that remains on the sidelines given that most in the developed world have always had their water needs met. These are the same people who are happy to receive and pay their water bill given its relative cheapness and may not fully understand that though 71% of the earth's surface is water-covered, only 2.5% of this is fresh water (much of which is frozen) and only 1% of the 2.5% is available for human use. Though water related issues are upstaged by most other macro news and headlines, there is no question it is a severely mispriced commodity by consumers and investors alike. A time will likely come when a market regulated approach will be necessary. If water continues to be taken for granted and not used efficiently, we expect at some future date, the right to access water will move to an official exchange approach and those users with increased needs will have to buy larger allotments and vice versa.

Though this scenario should materialize in time, it is important to appreciate that there are efforts being made to solve today's water scarcity issues, which we at Lynx Investment Advisory have been attempting to foster through investment. By investing in companies working toward improving the supply, efficiency, and quality of water, we expect to see both environmental and monetary rewards long-term. Desalinization technology, recycling and filtration improvements, as well as distribution infrastructure are a few of the areas within the water community being improved upon and it is in companies with this intellectual and physical capital to which we are attracted. Given the many different types of water related businesses trying to affect industry change, we believe, there will come a time when our country and world will have the tools in place to resolve today's crisis. Look at the efforts being made in China, and then at the upgrades many developed nations are addressing as they discover how much their deteriorating water assets are adding to the already exorbitant amount of wasted water every year. Both are indications of positive momentum. Then there are municipalities, feeling the positive effects of a country in recovery, are now more willing to spend the resources to improve water facilities. As news similar to the recent droughts in California and Brazil continue to arise, we believe these situations will bring the significance of the issue to the forefront, which should help education the world on the perils that lie ahead.

In terms of investment possibilities, though there are a limited number of liquid, actively managed mutual fund options, we are pleased with the philosophy and performance of those we currently use, while we have continued to receive exposure through ETFs such as, Guggenheim S&P Global Water Index ETF (CGW) and PowerShares Water Resources Portfolio (PHO).

There are very few items considered crucial for survival and potable water is most definitely one of these items. Investing in assets associated with water should not only be a profitable experience overtime, but by contributing to such an asset class an investor is supporting the revitalization of a societal necessity.