

Water Scarcity Theme

Background

Freshwater scarcity is a trend that, while the focus of study by many international agencies and think tanks, is vastly under-appreciated in the investment community. The amount of water in the world is finite. The number of us is growing fast and our water use is growing even faster. A third of the world's population lives in water-stressed countries now. By 2025, this is expected to rise to two-thirds. Water scarcity is now the single greatest threat to human health, the environment, and the global food supply.

Key Market Statistics:

- The EPA and other respected sources estimate that over \$1 trillion will be spent over the next 20 years to replace the aging water and wastewater infrastructure in the U.S.
- Only 20% of the world's population currently enjoys running water.
- The typical American lunch requires 1500 gallons of fresh water to produce.
- 1.1 billion people lack access to clean water and 2.4 billion lack access to proper sanitation.
- By the middle of this century, no fewer than seven billion people in 60 countries may be faced with water scarcity.
- The UN-backed World Commission on Water estimates that over \$180 billion a year is needed to tackle water scarcity worldwide.

Predicted water scarcity and stress in 2025



Investment Opportunities:

- Pipelines
- Drillers
- Water and Wastewater Treatment
- Transport
- Agriculture/Irrigation

Fraser Management's Investments

- Infrastructure repair & replacement:
We have invested in companies that produce the most widely needed component in the replacement of millions of miles of water and wastewater infrastructure – pipes.
- Drillers
We have participated in the need for new sources of freshwater by investing in companies that drill water wells.

We believe our “picks and shovels” approach to investing in water scarcity is the most appropriate avenue at this stage in the evolution of the trend. As this trend continues to garner increased attention, interesting opportunities will come up. For example, there are privately-held companies that are developing ways to transport freshwater to the Middle East in the holds of oil tankers coming to North America. Another promising possibility is in more efficient irrigation delivery systems under development. At present, 70% of the world's freshwater is used for irrigation. A further area under study involves companies providing technology to desalinate and remove impurities from seawater and contaminated water sources. We have not found good investment ideas to date in these areas, but constantly review and evaluate all aspects of the trend.

Water scarcity is a trend that will continue for many years, and investors have not yet focused on the enormity of the market opportunity. Our results from participation in water scarcity have been excellent, and we believe this trend will have meaningful impact on our portfolio as the crowd begins to take notice.