Water Importance

Since the beginning of human history, development of civilization has been dependent on the availability of water resources. A higher quality of life and a better public health are strongly connected to the improvement of water management. But since mid XX century the impact of human activities on the environment is increasing considerably and we're stretching our water supplies to the breaking point. Water prices will keep on raising.
Pneumofore is considering the present situation relevant also for industrial investment goods. Therefore we are committed to design air compressors and vacuum pumps with the lowest Life Cycle Cost. This includes all possible efforts to avoid the use of water for machine cooling purpose.

The history of human civilization is entwined with the history of the ways we learned to manipulate water resources. The earliest agricultural communities emerged where crops could be cultivated with dependable rainfall and perennial rivers. Simple irrigation canals permitted greater crop production and longer growing seasons in dry areas. **Five thousand years ago** settlement in the Indus Valley were built pipes for water supply and ditches for wastewater. Athens and Pompei, like most Greco-Roman towns of their time, maintained elaborate systems for water supply and drainage.
As towns gradually expanded, water was brought from increasingly remote sources, leading to sophisticated engineering efforts, such as dams and aqueducts. At the height of Roman Empire, nine major systems, with an innovative layout of pipes and well-built sewers, supplied the occupants of Rome with as much water per person as is improved in many parts of the industrial world today.
During the **industrial revolution** and population explosion of the 19th and 20th centuries, the demand for water rose dramatically. Unprecedented construction of tens of thousands of monumental engineering projects designed to control floods, protect clean water supplies, and provide water for irrigation and hydropower brought great benefits to hundreds of millions of people. Thanks to improved sewer systems, water related diseases such as cholera and typhoid, once endemic through out the world, have largely been conquered in the more industrial nations. Vast cities, incapable of surviving on their local resources, have bloomed in the desert with water brought from hundreds and even thousands of miles away. Food production has kept pace with soaring populations mainly because of the expansion of artificial irrigation systems that make possible the growth of 40 percent of the world's food. Nearly one fifth of all the electricity generated worldwide is produced by turbines spun by the power of falling water.
Yet there is a dark side to this picture: despite our progress, **half of the world's population still suffers** with water services inferior to those available to the ancient Greeks and Romans. As the latest United Nations report on access to water reiterated in November 2005, more than one billion people lack access to clean drinking water; some two and a half billion do not have adequate sanitation services. Preventable water related diseases kill an **estimated 10.000 to 20.000 children every day**, and the latest evidence suggests that we are falling behind in efforts to solve these problems. Massive cholera outbreaks appeared in the mid-1990s in Latin America, Africa and Asia. Millions of people in Bangladesh and India drink water contaminated with arsenic. And the surging populations throughout the developing world are intensifying the pressures on limited water supplies.

Tens of millions of people have been forced to move from their homes often with little warning or compensation to make way for the reservoirs behind dams. More than 20 percent of all **fresh water fish species** are now threatened or endangered because dams and water withdrawals have destroyed the free flowing river ecosystems where they thrive. Certain irrigation practices degrade soil quality and reduce agricultural productivity, heralding a premature end to the green revolution. Groundwater aquifers are being pumped down faster than they are naturally replenished in parts of India, China, the U.S. and elsewhere. And disputes over shared water resources have led to violence and continue to raise local, national and even international tensions.

Data from the Pacific Institute for Studies in Development, Environment and Security, California, USA

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