

Wet world drying - the world water crisis



Summary

The world is facing a water crisis. Freshwater scarcity and pollution are major environmental, economic and political problems facing people in the 21st century. This fact file considers why water is the new oil, and how the crisis might be averted.

Water, water everywhere - but hardly a drop to drink

Most of the Earth's surface is covered with water in constant circulation through the water cycle. Very little of this water is available to us for drinking purposes. 97% of the Earth's water is salty, contained with seas, oceans and estuaries.

Of the remaining 3%, most is locked away in ice caps or deep underground. Less than one quarter of one per cent of global freshwater is in lakes and rivers. It is from these wetlands that people obtain water.

The world is not short of water in most places ... but it is becoming very short of usable water.

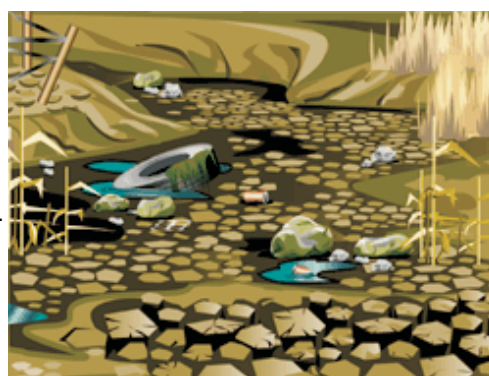
Nobody's making any more water, and nobody's making any less water. Indeed, there is as much water around today as when dinosaurs roamed the Earth.

It is just that there are far more people around - six billion of us - to drink, poison, pollute, discard and waste water.

One of the problems with water is that it's not evenly distributed around the Earth. Some places have plenty of water, and some have very little. Water supply may be erratic - all the rains may come at once or not at all. Further, water supply and treatment may be badly managed or non-existent.

One billion people worldwide have no access to clean drinking water, and 2.9 billion people have no access to water sanitation. Global freshwater consumption rose sixfold between 1900 and 1995 - more than double the rate of population growth. By 2025, two thirds of humanity may face life in water-stressed conditions.

The United Nations has estimated that one in five countries will experience water shortages within the next 25 years. In South America, only Paraguay has safe water access for over half its population. 22 African countries and 14 Asian ones have safe water access for less than 50% of their populations. Deforestation, irrigation and over extraction of water in Australia has increased desertification and lowered soil water retention. Many areas of North America and Europe have plenty of water, although the drying of aquifers and wetland drainage is a problem in the Caribbean and south west USA. Desertification is a problem in parts of Spain, and many



European wetlands are heavily polluted.

In the UK, less summer rain, low groundwater, and the shrinking of some aquifers, has led to water shortages - especially in the Thames Valley; north west and west England, and Wales.

Freshwater scarcity and pollution are the biggest environmental issues facing the planet. Water is the new oil. We can no longer take water for granted.

Crisis management - possible solutions

There are four main ways of dealing with the water crisis as follows:

Get more

The idea being that if you want more water, get more. This may be achieved by importing water from somewhere with a surplus, or by making water.

Singapore imports its water from Malaysia. California, Israel and Libya all bring water in from outside. This solution only works if neighbouring countries have peaceful relations.

New water cannot be made, but salt can be removed from sea water. There are 7,500 desalination plants worldwide - mostly in the middle east and dry parts of the USA.

Use less

If you can't get more water, use less. This may be achieved by using water wisely; charging for water use, and/or making existing consumption more efficient.

Using water wisely is the responsibility of everyone from governments to individuals. Dripping taps can be turned off; leaky pipes repaired; showers taken instead of baths; hosepipes used sparingly or not at all.

Pricing mechanisms are used in some countries (like Israel, Australia and the USA) to regulate usage.

Making existing consumption more efficient through the provision of clean water sanitation and wetland conservation, may keep the water crisis at bay.

Have fewer people to use the water

The reasoning here is that fewer people in the world would consume less water. It's a utopian dream but totally unrealistic. Water consumption is growing at twice the rate of human population. Further, the complex and erratic nature of water supply, consumption, population growth and support this argument.

Fight for it

An extreme option is to steal water from a neighbouring country. Who knows how many of the 21st centuries wars will be fought over the ownership of water resources?

Further reading

Water Wars. M.de Villiers (Weidenfeld and Nicolson, 1999).

