



WHY WE SHOULD CONSERVE FRESH WATER

Less than 3% of the Earth's water is fresh. Much of that (around 2%) is either highly polluted or trapped as ice in glaciers and polar caps. The 1% that's left over is potable water that humans use to drink, cook, grow crops, bathe, and a whole host of industrial and other uses. Clean water is the number one most important factor in public health. It is expected that, by 2025, 2.8 billion people will face water scarcity. By 2050, that number may be as high as 7 billion people. Right now more than 5 million people die every year from disease caused by poor water or sanitation quality.

THREATS TO FRESH WATER

Threats to fresh water include overuse, poor distribution, soil erosion, pollution, and salination.

- ⇒ Oil residue washes off our streets and into water supplies.
- ⇒ Raw sewage is constantly released into water supplies, whether from faulty septic systems, sewage overflow, or by cities with no waste treatment facilities.
- ⇒ Agriculture pollutes water with animal waste, hormones, fertilizers, and pesticides.
- ⇒ Increasing use of anti-bacterial agents (especially containing Triclosan) is contaminating water supplies.
- ⇒ In the United States, antibiotics, hormones, steroids, and other chemicals have been detected in 80% of streams and 93% of groundwater.
- ⇒ Acid rain caused by industrial sulfur dioxide and nitrogen oxides emissions increases the acidity of effected rivers and lakes, killing wildlife and contaminating water supplies.
- ⇒ The clear-cutting of forests and increased agriculture leads to increased soil erosion, which runs off to pollute our rivers and streams.
- ⇒ Destruction and development of wetlands removes natural water purification systems and increases pollution and salination of water sources.
- ⇒ Overuse of groundwater not only prevents the recharging of aquifers but causes salination of remaining supplies.
- ⇒ Global warming causes ocean levels to rise, increasingly contaminating groundwater with salinated water.
- ⇒ Global warming also decreases the size of glaciers and mountain snow stores, and quickens their melting, leading to water shortages at peak water usage times in the warmest months.
- ⇒ Global climate change manipulates weather patterns, creating decreased precipitation and drought in some areas and floods in others (flood water that is often unusable as a potable water source).
- ⇒ For the first time in recorded history, major rivers, such as the Colorado, Ganges, Indus, Rio Grande, and Yellow, have begun to run dry for days, weeks, or even months out of the year.

Combine all these processes with a rising global population, and it's no wonder more of us may soon be facing water scarcity. Remember, it's not just here in the United States where people will face clean water shortages. Many of the global poor already have obstacles in accessing potable water. Increases in water salination and pollution by human activities are also damaging to wildlife, which depend on potable water to live, just like us.

AMERICANS USE THE MOST WATER



The average American uses more water than any other nationality on Earth, even though 19% of our water used must be imported. Every day the average American uses over 100 gallons of water for domestic use. When you take industry, agriculture, and lawns/fountains/golf courses into account, that number jumps to more than 660,000 gallons of water used per capita every year in America. A lot of our water use is not necessary. For instance, more than half the water used on American agriculture is used to water grass, the number one most irrigated crop in the United States. In America every year, 4.8 billion gallons of potable water are literally flushed down the toilet. If every one on Earth lived like the average American, we would need between 5 and 6 planet Earths to provide the amount of water used.

70% of available freshwater is used to irrigate crops. Some crops and food products take more water, while meat requires the most water. American adults eat twice the global average of meat every day. The following is a partial list of the amounts of water used to raise cattle or grow crops:

1,500 L of water = 1 kg of sugar
3,000 L of water = 1 kg of rice
15,500 L of water = 1 kg of beef

Wheat and soybeans take only 2% of the water needed to produce the same weight of beef.

WHAT THE FUTURE HOLDS

The second half of the twentieth century was much wetter than the first half. This means we could be entering into another dryer cycle which would require reduced water usage given the growing population and increased demand for farming. In dryer parts of the country, such as the southwest, the shortages that exist already would become far worse if there are no changes made to the current trends in water consumption.

DECREASING WATER USAGE ALSO DECREASES ENERGY USAGE

Water has lots of secondary environmental and monetary costs associated with it that are rarely recognized. For example the energy used to heat water for dishes, laundry and showers is the second largest energy user in many households. It requires energy to pump, clean, heat or cool water which means that by conserving water energy is also conserved.

