

# **The Amazing Cycle of Water**

# Precipitation

Reservoir

2

## The Water Cycle

Nature makes sure we have a continuous supply of water through a process we call the water cycle. Just like a bicycle wheel, the water cycle has no beginning and no end. It has been the same since time began.

### **Cloud Storage/ Rain**

When the clouds blow across the land and the temperature drops, vapour forms into droplets, which fall back on the land as rain, snow or hail.

#### Reservoir

This water then finds its way to streams and rivers, or it can percolate through porous ground such as chalk or it can be trapped in man-made reservoirs. The reservoirs, rivers, lakes and natural underground water stores (aquifers) are the sources of water we use at home and at work.

# Water Treatment Works

Northern Ireland Water enters this natural cycle and makes sure that the water reaching your home is wholesome and safe. This is done by passing it through water treatment works, where it is filtered and bacteria are removed.

The water is then supplied through a network of pipes to homes, businesses and all other users.

# Wastewater Treatment Works

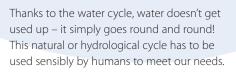
Once used, water from our baths, washing machines, sinks and toilets, together with rain that runs into the sewers, is called wastewater or sewage. It is treated at a wastewater treatment works. Once it is cleaned, it is put back into the rivers or sea and the water cycle begins again.

### Evaporation

When the sun shines on the seas, rivers and lakes it heats it and turns some of the water into water vapour. This rises in the sky and forms clouds. This is called evaporation.

#### **Amazing Facts**

- The oceans hold 97% of the world's water.
- 2% is frozen in the polar ice-caps.
- 1% not only provides all the water we use, but also includes all the lakes and rivers of the world, all the water in the atmosphere and all the water in the ground!
- All the water in the world's atmosphere only equals about 10 days' normal rainfall. You can imagine that if water was something we used up like gas or oil, then the world would run dry very quickly indeed.
- We depend on the constant re-cycling of that 1% of water to meet all our needs.



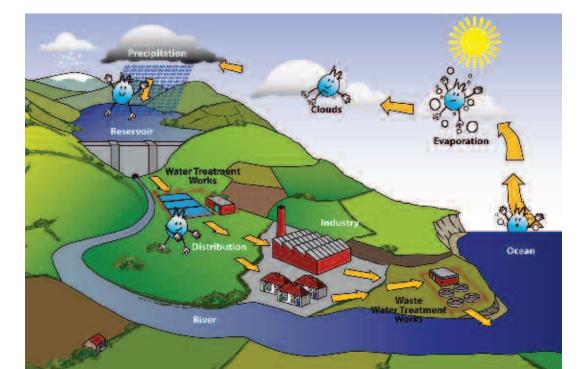
# Supply and Demand

We are a very thirsty nation. The increase in population, the development of new towns, industrial growth and water-based recreation, have all combined to create an increasing demand for water.

Currently Northern Ireland Water supplies around 710 million litres of water each day. We each use approximately 145 litres of clean treated water every day for washing, cooking, drinking, watering the garden, etc. Factories, offices and shops also use vast quantities.

# **Use Water Wisely**

The extraction, treatment, distribution and disposal of water is expensive and has environmental implications. Therefore, we all need to do our bit and use water wisely. Why don't you request one of our free water audit leaflets for either the home, school, business or agricultural premises and work out how your usage compares to the average. You may be surprised at how much water you actually use. Leaflets, which provide advice on how to conserve this precious resource, are also available.





# Contact us:

Waterline on 08457 440088

Report leaks on roads and footpaths to Leakline: 08000 282011

Text phone: 0800 0515446 email: waterline@niwater.com www.niwater.com

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