# Blackrock Green Home "Water Wise" 


'Oil peak: there are alternatives; Water peak: there are NONE' (Hoard, 2007)
We need your help to spread the message about this precious resource.

## Water and its Uses

Ireland is an island with over 220 million acres of marine territory, our largest natural resource - a national asset for food production, transport, tourism and the generation of sustainable energy.

When Neil Armstrong looked at the earth from the moon in 1969, it looked all blue. Water covers over $75 \%$ of the Earth's surface. It is without doubt the most valuable of all the Earth's natural resources. In 2013 there are over 7 billion people in the world with 80 million added each year. Worldwide, the consumption of water is doubling every 20 years - more than twice the rate of increase in population.

Although water shortages are a rare occurrence in Ireland, increased demand now and in the future, coupled with the impacts of climate change, are likely to result in shortages in the coming years. Forfás has stated that large urban centres may experience water shortages within the next five years. Water usage in Ireland at present is about 160 litres per person per day and is above the European average where water charges are common. As Ireland's population grows over the coming years, water conservation will become increasingly important, especially as we will also have to pay for the water we use.

Water is also important for biodiversity because biodiversity is lost as a result of pollution associated with human activities, including inadequate wastewater treatment and poor agricultural practices.

## Did you know?

The oceans hold $97 \%$ of the world's water, while $2 \%$ is frozen in the polar ice caps. The remaining $1 \%$ provides all the water in the atmosphere and all the groundwater, lakes and rivers that we use as our water sources. We depend on the Water Cycle (evaporation, condensation, precipitation, absorption and runoff) to recycle this $1 \%$ to meet all our needs.

Biologically and chemically clean pure water is essential for healthy life. Water makes up $60 \%$ to $70 \%$ of the human body and it is essential for basic biological functions. We require about 2 litres of water per day to maintain adequate hydration, and we can only survive a few days without water.

Our drinking water comes from two sources: from groundwater in the form of underground aquifers and surface water from streams, rivers and lakes.

Groundwater is pumped to the earth's surface from wells. This water usually requires little treatment before drinking because it has already been filtered through sand and rock as it settles into the earth. Surface water requires filtration to remove any silt, sand or organic matter collected by the water as it moved from one area to another. Chemicals are added to speed up the process that nature uses to clean water.


Unfortunately contamination due to human activities has resulted in a decline in Ireland's water quality over the last thirty years. Water pollution arises from different sources in different areas. Sources of water pollution in urban areas include outflows from sewage treatment and industrial plants and run-off from roads. In rural areas sources include fertilisers and animal wastes arising from agricultural activity. Groundwater contamination can also arise in rural areas as a result of poorly maintained or constructed septic tanks.

Did you know? In 1889 the UK government invested in sanitation infrastructure - there was a 15 year increase in life expectancy over the next four decades!

## Find the Leaking Tap in your Home:

- 30 drops per hour $=3,800$ litres per year
- 120 drops per hour $=15,300$ litres per year


## Approximate Water Usage in the Home:



| Activity | Amount of Water Used |
| :--- | :--- |
| Bath | 80 litres |
| 5 Minute Shower | 35 litres |
| 5 Minute Power Shower | 125 litres |
| Brushing Teeth with Tap Running | 6 litres per minute |
| Brushing Teeth with Tap Turned Off | 1 litre |
| W.C. Flush (standard) | 9 litres |
| W.C. Flush (modern) | 6 litres |
| Washing Machine (standard) | 65 litres |
| Washing Machine (modern) | 45 litres |
| Dishwasher | 20 litres |
| Hosepipe | 9 litres per minute |
| Washing Car with a Bucket | 10 litres |

## Did you know?

A regular shower uses about 35 litres of water in 5 minutes. But a power shower uses over 125 litres in the same time.


