

managing waste better



water

uisce

This brochure will help create and promote environmental awareness with special emphasis on water

“water is a source of life”

This leaflet is intended to provide a better understanding of water related issues.

Thanks for taking the time to read this leaflet and please try some of the suggestions mentioned.

There are very few natural water sources, which are ideally suited for domestic use. Treatment is often necessary to remove any impurities in the water.

All waters essentially come from rain, hail or snow, the three main forms of precipitation. Some of the rain falling on the ground flows into streams and rivers, some into natural ponds and lakes and some into man-made reservoirs.

The rain which soaks into the ground may be collected by sinking boreholes (wells) or it may emerge in the form of springs.

Water Pollution

Natural Pollution: As rain falls it absorbs dirt, dust and grease from the air. As it flows over the ground the water collects mud, clay and decayed plant matter and also bacteria derived from soil and vegetation.

In the ground, water dissolves soluble salts from the rocks whilst water containing carbon dioxide can dissolve carbonate rocks to form bicarbonates.

Man-made Pollution: In the absence of adequate controls many human activities have the potential to cause pollution of water.

- Untreated sewage introduces putrefying organic matter and, in particular, bacteria and pathogenic micro-organisms.
- Farming often causes soil manure and organic debris to be washed into streams, rivers and lakes.
- Mining may contribute harmful contamination and fine suspended matter to water courses.
- Chemical manufacture may produce effluents containing toxic substances which, if unregulated, can cause taste and odour and kill off the natural life in the rivers.
- Natural waters may, therefore, have one or more of the following undesirable characteristics:

Colour:

Due to dissolved organic matter, e.g. from peaty land, and mineral salts of iron or manganese.

Suspended Matter:

Suspended mineral and vegetable debris.

Turbidity:

Suspended mineral or organic matter.

Water Treatment

In order for us to consume pure and palatable water, it is necessary for us to treat the water to ensure that it is clear, colourless, odourless, palatable, safe and reasonably soft.

Natural purification of water

We all know that there are many ways in which waters may become polluted, but there are also natural processes at work tending to purify the water. **These are storage and filtration.**

- Storage in ponds and lakes
- Suspended matter settles to the bottom
- Harmful bacteria gradually die out
- Colour reduced by bleaching effects of sunlight
- Hardness reduced by liberation of carbon dioxide to air or algae.

water reuse reuse recycle water reuse recycle water

“Its easy to
make a
difference”

- Filtration through soil removes suspended matter and bacteria. Some impurities may be removed by biological action.

Water Usage

We use water for many things in our lives. We take it in with food and drink. We use it to clean our clothes, our surroundings and ourselves. We use it for recreation such as swimming, fishing, sailing and skiing.

There are also many hidden ways in which we use water. For example, many litres of water are needed to manufacture magazines and newspapers.

This is a list of the average water consumption for a number of activities in the home.

Bath	100 litres
Hand Washing	2 Litres
Shower	15 Litres
Cooking a meal	15 Litres
Dish washing (by hand)	15 Litres
Dish washing (machine)	35 Litres
Washing Machine	90 Litres

Forms of Water

Solid: A solid has a shape. If you remove an ice cube from its container, it will hold its shape until it melts

Liquid: Liquids flow and have no shape. If you pour liquid into a glass, it takes on the shape of the glass

Gas: When water is heated, it reaches a point at which it cannot get any hotter. Then it turns into steam. Steam is a gas.

Ways to conserve water:

- Check leaking toilets, as a leaking toilet can waste lots of water
- Make sure to insert the plug into the sink when washing vegetables and dishes
- A bath can use up to four times as much water as a shower
- Make sure you have a full load in the dishwasher
- Make sure you have a full load in the washing machine as it uses up to 90 litres per wash

- When watering the garden use a watering can
- Use a bucket of water instead of a hosepipe for washing the car.

*“we can survive
for weeks without
food, but only days
without water”*



“use your water wisely”

Cuireadh an
leabhrán seo le
chéile chun go
mbeidh tuiscint níos
fearr ag an bpobal
ar chúrsaí uisce.

Míle buíochas as
ucht an t-am a
thógáil an leabhrán
seo a léamh.

