

# Water Cycle

Water is a precious resource. The same amount of water exists on Earth today as existed three billion years ago when the Earth was formed.

**Our water is being continually recycled in what we call the water cycle.**

**In the water cycle, water goes round and round the Earth through a number of processes.**

## EVAPORATION

Sunlight raises the temperature of liquid water in oceans and lakes. Water evaporates from the Earth's waterways and rises (invisibly) into the air as water vapour, a type of gas.

## TRANSPIRATION

Transpiration occurs when plants give off water vapour through tiny pores in their leaves. This is the plants way of getting rid of waste. This is the same as when people and animals sweat when they are hot.

## CONDENSATION

Water changes state when temperatures fluctuate. The cooler the air the less water vapour it can hold and the warmer the air the more it can hold. When the air cannot hold all the water vapour, the excess vapour condenses and turns into tiny droplets of water, which appears as fog, mists or clouds.

## PRECIPITATION

As clouds form, wind moves across the globe spreading out the water vapour. Eventually the clouds can't hold the moisture and they release it – a process called precipitation – and it returns to Earth as rain, hail or snow.

## INFILTRATION

Infiltration is an important process where rain water soaks into the ground, through the soil and underlying rock layers. Some of this water ultimately returns to the surface as springs or in low spots downhill. Some of the water remains underground and is called groundwater.

Bundaberg Regional Council  
PO Box 3130  
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Council hours  
8.15am to 4.45pm  
Monday to Friday

### Fact Sheets available:

1. Water Cycle
2. Water Treatment
3. What I need to know about Wastewater
4. Wastewater Treatment
5. Water Pollution
6. Water Recycling
7. Water Efficiency
8. How to read your Water Meter
9. Water Meter Home Accuracy Check
10. Drip Water your Garden and save
11. Important things to know about drip watering
12. Water Audit for the Household
13. Rainwater Tanks
14. Pool Maintenance

### Booklets available:

1. You Can Take Control
2. Create Your Own Water Wise Garden

Additional fact sheets from WaterWise Queensland can also be obtained through you Local Council.

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## SURFACE RUN-OFF

Much of the water that returns to Earth as precipitation runs off the surface of the land, and flows downhill into streams, rivers, ponds and lakes. Small streams flow into larger streams, then into rivers, and eventually the water flows into the ocean.

Surface run off is an important part of the water cycle. Through surface run-off much of the water returns again to the oceans, where a great deal of evaporation occurs.

## GROUNDWATER

Ground water is simply water under the ground where the soil is completely filled or saturated with water. This water is also called an 'aquifer'.

## WATER TABLE

The water table is found underground where the rock and soil begin to be filled or 'saturated' with water.

