## WHERE DOES THE WATER COMES FROM?

Water has no starting point, neither ending point because it circulates around in a water cycle and the amount of water is constant in this closed system. We reuse water at all times and therefore the water cycle is prone to be affected by natural and human activities such as throwing of rubbish into the river, open burning or usage of pesticides.

There are 3 important activities involved in the water cycle which are **inflows**, **outflows**, **and storage**. Inflows add water to the different parts of the water cycle, while outflows remove water. Storage is the retention of water by parts of the water cycle. Because water movement is cyclical, an inflow for one part of the system is an outflow for another.

For example, when water seeps through the ground, it will be an inflow to the aquifer, while the discharge of water from the aquifer to the rivers and streams is an outflow of the aquifer but an inflow to the stream and river. Over time, if the amount of water added to the aquifer (inflow) is more than the water discharged to the river (outflow) there will be a substantial amount of water stored. Conversely, if the inflows to the aquifer are less than the outflows, the amount of water stored decreases and causes **WATER SCARCITY**.

THE RAW WATER CYCLE IS VERY
IMPORTANT TO ENSURE THE
AVAILABILITY OF WATER FOR OUR
CONSUMPTION. HOWEVER, A
SYSTEM FOR EXTRACTION,
TREATMENT AND DISTRIBUTION IS
EQUALLY IMPORTANT SO THAT WE
GET CLEAN WATER WHEN WE OPEN
OUR TAPS AT HOME!

# TIPS TO PROTECT OUR WATER RESOURCES



- Do not throw your waste into the river because the river system is the major source for drinking water in Malaysia. The increasing number of "dead rivers" and highly polluted rivers in Malaysia proves that our rivers are prone to pollution and the water from these polluted rivers will increase the cost of water treatment of the water supplied to our homes.
- Usage of household items such as nonbiodegradable detergent, cooking oil, pesticides and chemical for cleaning should be reduced or eliminated. Opt for biodegradable or environment friendly detergent, use organic pesticides and ensure proper disposal of your cooking oil.
- Check the contents of items such as your air conditioner, refrigerator and insect spray of the level of chlorofluorocarbon (CFC) release or other green house gases and try to minimize it because air pollution also affects the water cycle and our water resources. Car pooling is a good way to reduce the emission from vehicle smoke.
- Be a concerned citizen by reporting any incidents of industrial effluent discharge into the water ways, industrial air pollution, illegal logging activities, and untreated discharge from the sewage treatment plant or construction activities without proper drainage system around your area to relevant authorities.

For more information, please visit : www.fomca.org.my or www.ktak.gov.my

### START SAVING STOP WASTING



## KNOW YOUR WATER CYCLE

## NATIONAL WATER CONSERVATION CAMPAIGN

**JULY 2006 – JUNE 2008** 

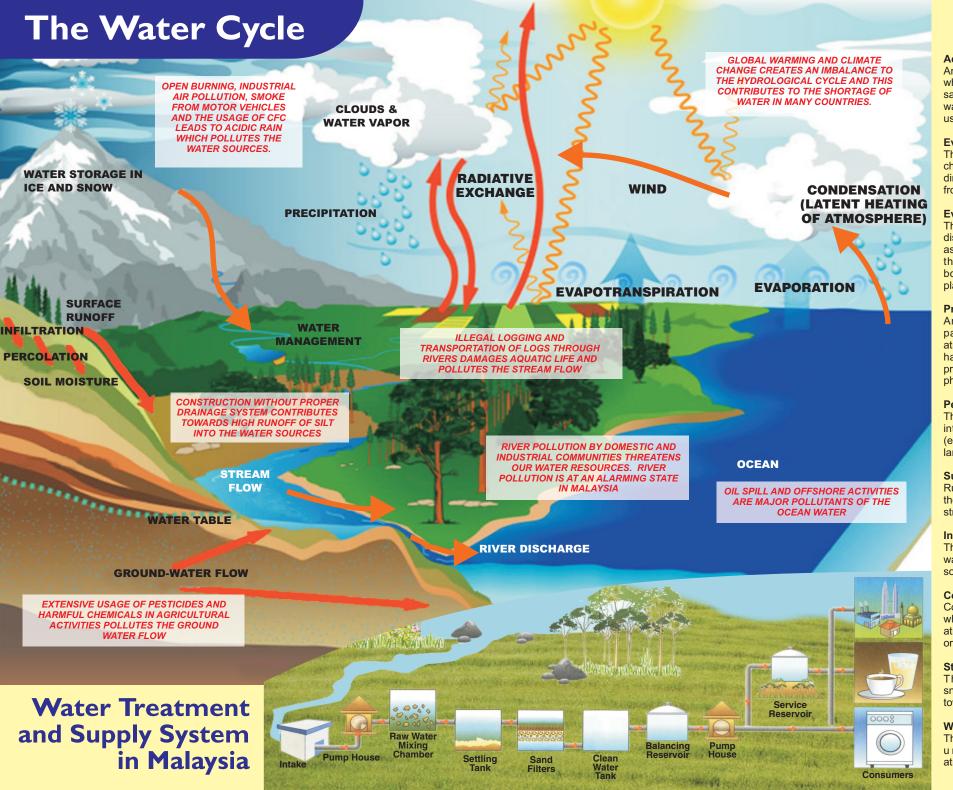


MINISTRY OF ENERGY, WATER AND COMMUNICATIONS (MEWC)

with



FEDERATION OF MALAYSIAN CONSUMERS ASSOCIATIONS (FOMCA)



#### Glossary

#### Aquifer:

An underground layer of water which contains rocks, gravel, sand or silt from which ground water can be usefully extracted using a waterwell.

#### Evaporation:

The process by which water is changed to gas or vapor; occurs directly from water surfaces and from the soil.

#### Evapotranspiration:

The process by which water is discharged to the atmosphere as a result of evaporation from the soil and surface-water bodies and transpiration by plants.

#### Precipitation:

Any or all forms of water particles that fall from the atmosphere, such as rain, snow, hail, and sleet. The act or process of producing a solid phase within a liquid medium.

#### Percolation:

The movement of water through interstices of a rock or soil (except the movement through large openings such as caves).

#### Surface runoff:

Runoff (water) that travels over the land surface to the nearest stream channel.

#### Infiltration:

The downward movement of water from the atmosphere into soil or porous rock.

#### Condensation:

Condensation is the process whereby water vapor in the atmosphere is returned to its original liquid state.

#### Stream Flow:

The flow of rainwater or snowmelt over the land surface toward stream channels

#### Water table:

The top water surface of an unconfined aquifer at atmospheric pressure.