

## What is Water Sensitive Urban Design?

Water Sensitive Urban Design (WSUD) describes a new way of thinking about our water resources. WSUD can help us conserve water, make better use of the water in our homes and improve the health of our creeks, rivers and bays. It can also save us money in the long run because we use less of the water that we pay for.

WSUD involves changing the way we use water in designing urban development.

It's simple. We need to change from the old way of doing things to the new way...

- Support good water habits by using water conserving taps and fixtures and by buying water efficient appliances
- Collect grey water (from bathrooms and laundries) and rainwater (from roofs) to use on the garden
- Use rainwater from the roof to flush toilets all year around
- Treat stormwater (rainwater runoff from hard impervious surfaces) to remove pollution before it reaches our drains and creeks



Merri Creek – Coburg

The Merri Creek receives stormwater runoff from areas of Moreland City Council

This new way of using water resources will help us protect our environment and reduce the amount of water we need from Melbourne's reservoirs.

## Different Types of Water

Today we talk about different types of water. For example,

- **Potable water** or 'drinking water' is the water we buy from water companies. Water is collected in reservoirs or drawn from rivers before it is piped throughout Melbourne to our homes. Melbourne will run out of water if we don't take steps now to reduce water use and use more water from other sources, such as grey water and rainwater (stormwater).
- **Grey water** is the waste water from our household appliances and fixtures such as
  - baths and showers
  - washing machines and dishwashers
  - kitchen and laundry sinks

The safest grey water to use on the garden is wastewater from baths, showers and the final rinse cycle of washing machines.

- **Black water** is the waste water from
  - toilets
  - bidets
  - urinals

Black water should never be reused unless it has gone through an approved cleaning treatment.

- **Stormwater** is water runoff from hard, impervious surfaces, including:
  - the rain that falls on the roof and garden
  - the water that runs off your property when you use a hose or watering system

Rainwater collected from the roof into a tank can be used to flush the toilet or water the garden. Because there is so much pollution in the air that is washed down with the rain, rainwater can only be used for personal washing if it has been properly disinfected. Rainwater also picks up pollution from roofs, gardens and paving. It should be treated to remove pollution before it is allowed to run to the stormwater drain.

**For the typical household, Moreland's goals are to**

- Reduce water use at the tap by 25%. This can be achieved by using water conserving taps, fixtures and household appliances.
- Treat rain water runoff (storm water) to remove pollutants that damage the environment
  - remove 80% of the suspended solids (sediments), 45% of the phosphorus and 45% of the nitrogen in storm water before it enters the storm water drain. This can be achieved by using rainwater inside the house, holding rainwater for use in the garden and installing pollution removal devices to clean any storm water that runs off the property.

**Notes:**

The Victorian Government offers rebates for purchase and installation of water saving taps and fixtures. Rainwater tanks and grey water systems that hold and treat the grey water must be installed by a licensed plumber.