

Becoming More Water Wise

TO HELP PROTECT LAKE MACQUARIE

It is a well known fact that urbanisation has led to a rapid decline in the health of our waterways over the past two centuries.

In the past, hard engineering solutions such as open concrete drains often replaced natural systems like wetlands and creeks.

With hard sealed surfaces such as roofs and driveways, conventional drains deliver storm water directly to the stream every time it rains. This intense flush is very harmful to the health of the creeks and Lake, causing disturbance to plants and animals, as well as bringing a cocktail of pollutants.

A new way of dealing with water cycle management for both private and public property is called Water Sensitive Urban Design.

Water Sensitive Urban Design is all about reducing the excessively large volumes of water from development entering our waterways and also using natural systems and vegetation to improve the quality of stormwater.

Effective Water Sensitive Urban Design can therefore help ensure that run-off and its contaminants are retained in the catchment, rather than enter our waterways. It mimics natural landscapes, where water is held in the ground and fed into the waterways over a period of time.

Water sensitive urban design maximises the use of natural materials or systems to replace their synthetic counterparts. One of the biggest benefits is improved water quality as natural systems (such as wetlands and vegetated swales) work as filters, removing pollutants before they enter the Lake.



Traditional concrete kerb and guttering on our roadways direct untreated run-off into stormwater drains. Vegetated swales, like this one, help filter pollutants before the run-off enters the stormwater system.

Studies in the United States have shown that these natural systems are capable of removing more than 83% of sediment found in stormwater.

Rather than think of stormwater runoff as wastewater, it should be thought as a resource.

Rainwater can be easily collected in a water tank for many uses including washing, watering gardens and flushing toilets. A water tank not only helps to save one of our most precious resources, but also helps to control the harmful impact that storm water can have on our waterways and lake.

The water tank was once an icon of the Australian way of life in the bush. It can now become an urban icon of the way Australians have adopted water sensitive design into their urban lives.

Homes that make use of surfaces such as porous paving are also helping to limit the amount of stormwater entering the Lake. Hard concrete surfaces such as driveways, roads and car parks also often accumulate oils, grease and fine sediments which after rainfall, are often washed into our waterways.

In the garden, personal aesthetics can be nurtured along with native plants and water features such as ponds that also provide habitat to native birds, amphibians and other creatures such as insects in the environment.

