

# Water Tanks

## **Fact Sheet**





#### September 2011

A publication of the Greener Houses Project - 2011



## Saving Water

As we know Australia is a country of droughts and flooding rains. But with climate change we have been told that droughts will become more frequent. We can reduce our need for very expensive desalination water by harvesting rainwater. Harvested rainwater has a minimal carbon footprint unlike the enormously energy-guzzling Desalination plant.

Even in a drought you can harvest rainwater. You may be surprised that during the last 5 years of the drought we still averaged 40 mm of rain per month in Fairfield. The average 150m2 house in Fairfield could harvest 6,000 litres of water per month - enough to flush the toilet 20 times and do a load of washing a day.















### Collecting water from the roof

The monthly rainfall in a northern suburb of Melbourne during the drought years was nearly 40mm and since then the average has increased to about 70mm.

- For every square meter of roof area connected to a water tank you can harvest 1 litre from just 1mm of rain.
- If your house has a roof area of 150 square meters and an average monthly rainfall of 40mm of rain you can harvest 6,000 litres each year.
- Allowing for losses through evaporation your monthly harvest will approximate 5.100 litres.
- That's 170 litres a day that you can use in the toilet, laundry and garden.

By updating toilet/s to a 4 Star Dual flush: 4.5/3L with an average flush of 3.5Ls¹ you will only use 70Ls a day for a family of four. A 7 Kg front-loading washing machine with a 4.5 star water rating uses up to 58 litres on a normal wash cycle. Leaving you 42L or 10 buckets of water a day for your favorite plants.

<sup>1</sup>The average flush volume used by a dual flush toilet is taken as one full flush and four half flushes



### Did you know?

- A water-efficient washing machine may use only one-third the water of an inefficient model.
- An old-style single-flush toilet could use up to 12 litres of water per flush, while a standard dual flush toilet uses just a guarter of this on a half-flush.
- A standard showerhead may use up to 25 litres of water per minute whereas water-efficient showerhead might use as little as seven litres per minute, which is less than a third.
- Life cycle analysis (LCA) has been done to work out the long term impacts
  of the material used to make water tanks. Interested? Try a web-search
  for "LCA water tanks".

#### Other ways to save water at home

- Turn off the tap when brushing your teeth.
- Install flow control valves to further reducewater use.
- When you replace your old washing machine choose one with a four-star water rating.
- Only wash when you have a full load.
- Fix any dripping taps or leaking toilet cisterns.
- When waiting for water to run warm in the kitchen or bathroom collect the cold water to use on the garden.

#### **Experience from Jika Jika Community Centre**

"At Jika Jika Community House in Plant Street we have installed new tanks with a capacity of 8974 litres. This will provide sufficient water for the community house toilets and watering the garden, and saving the Centre money by reducing its water bill."

You too can save money and reduce your Carbon Footprint by harvesting rain water.



