

# Stormwater Management

## Goals:

- Re-use rainwater on site
- Reduce volumes entering the municipal storm-water system
- Minimise use of Metro water & save on water-charges

## Rainwater harvesting

Rainwater running off the roof is channelled into two 25,000 litre storage tanks. The water is used for

- flushing the urinals and ground floor toilets
- irrigating gardens and glasshouses.

An additional 25,000 litre tank detains any overflow from the storage tanks, releasing it slowly into the rain garden area.



## Hyperfiltration for labs

A reverse osmosis machine provides pure water to specialist laboratory needs. Unfiltered reject water flows into our storm-water management system for re-use in urinals and gardens.

## Wind-powered generator

A wind-powered generator provides sufficient electricity to pump water back up to the roof tank.

## Rain garden

During storms when the detention tank has reached capacity, water flows to the raingarden area (still under development), which includes a soak pit that can drain 10 litres/sec. Water in excess of this will go into the stormwater system but this is not expected to happen often.

## Reduced runoff from the carpark

The car park has a pervious surface allowing rainwater to infiltrate the underlying soil. Soil water flows down the gentle slope to the rain garden area where contaminants are removed by natural ecosystem processes. In the near future, we will install treatment walls to filter road runoff preventing contaminants from entering the stormwater system.

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