

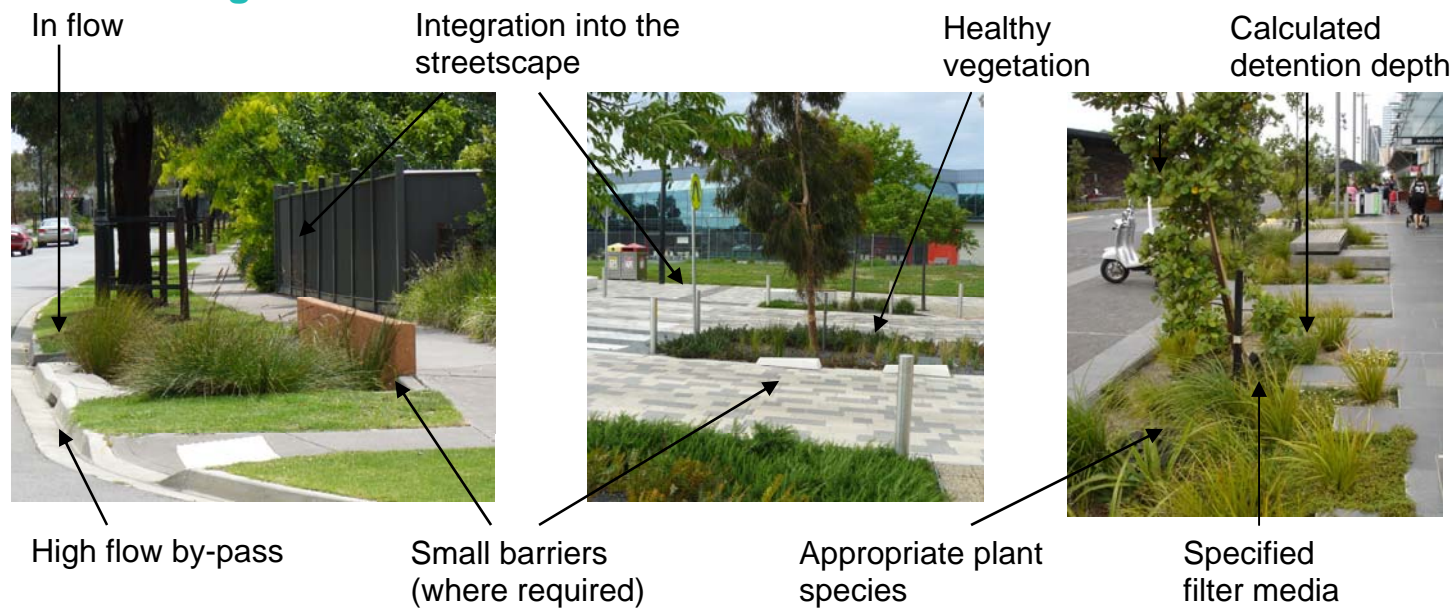
Raingarden design principles

Building raingardens in our streetscapes to treat stormwater

What is a raingarden?

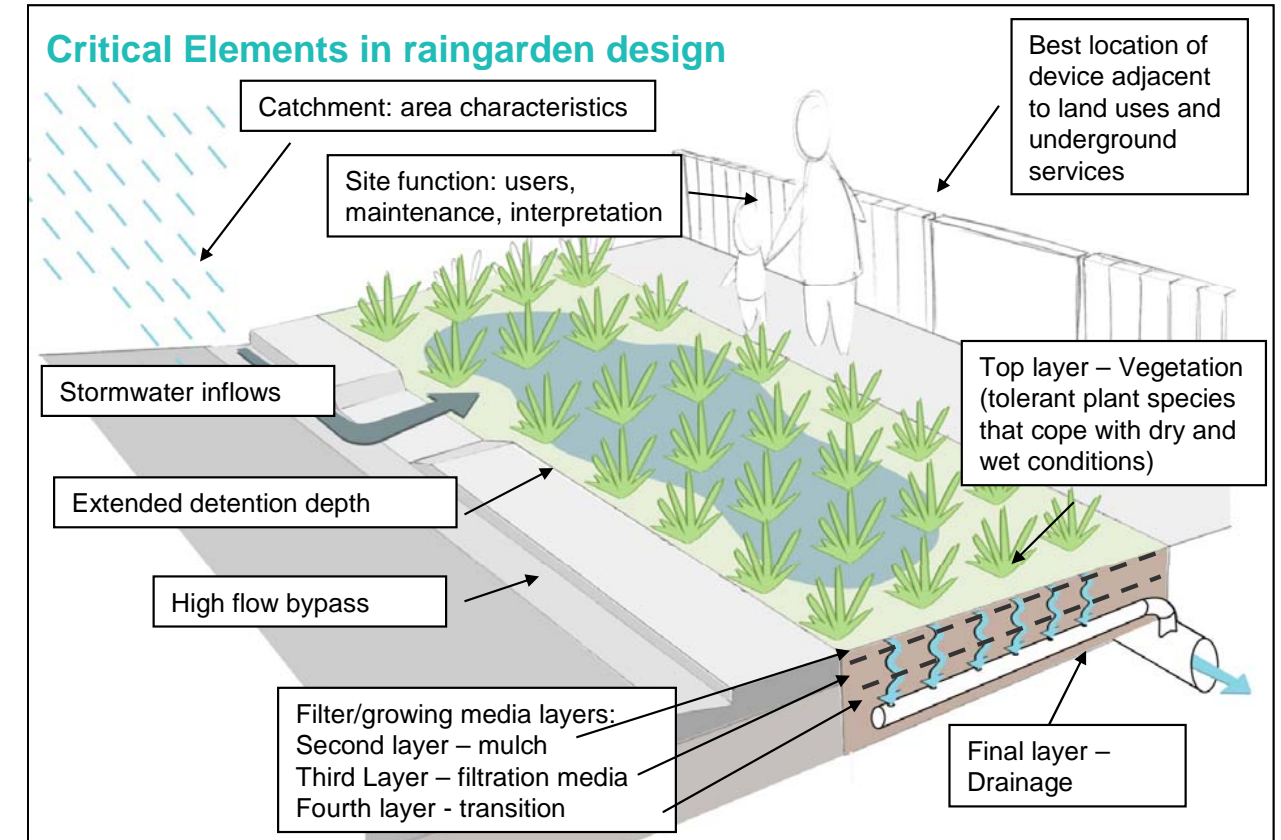
A raingarden is a garden bed which is designed to treat stormwater. As water falls onto and enters the garden it is passed through a filter media which is planted with vegetation. Both of these elements provide treatment. Treated stormwater is then fed back into the drainage system or left to infiltrate into the ground below. When integrated into streetscapes, raingardens can provide a greener solution to treating stormwater and reduce the demand on potable water to water the plants.

Good design elements



For more technical information

- Raingarden Installation Guide - <http://www.clearwater.asn.au/content/raingardens-installation-guide>
- Maintenance guide from the Auckland Council in NZ - <http://www.clearwater.asn.au/content/operation-and-maintenance-guide-raingardens>
- FAWB guidelines for bio-filtration system specifications - <http://www.clearwater.asn.au/content/facility-advancing-water-biofiltration-fawb-guidelines-version-301>



Things to watch out for

Dry patches could be a result of sediment build up in garden or entry point



Erosion and scour from high flows

Curbing width and design – capturing the sediment rather than it ending up in the raingarden

Position of high flow bypass, water will run into this first and not make it into the garden



Avoid use of organic mulch on top as material floats and block drain

No extended detention – garden surface flush with street level

Tips – the top layer of sediment may need to be removed as part of garden maintenance and poor vegetation health may be the sign of sediment/pollutant removal required, and/or poor plant selection and system