

Raingardens

Raingarden cross section

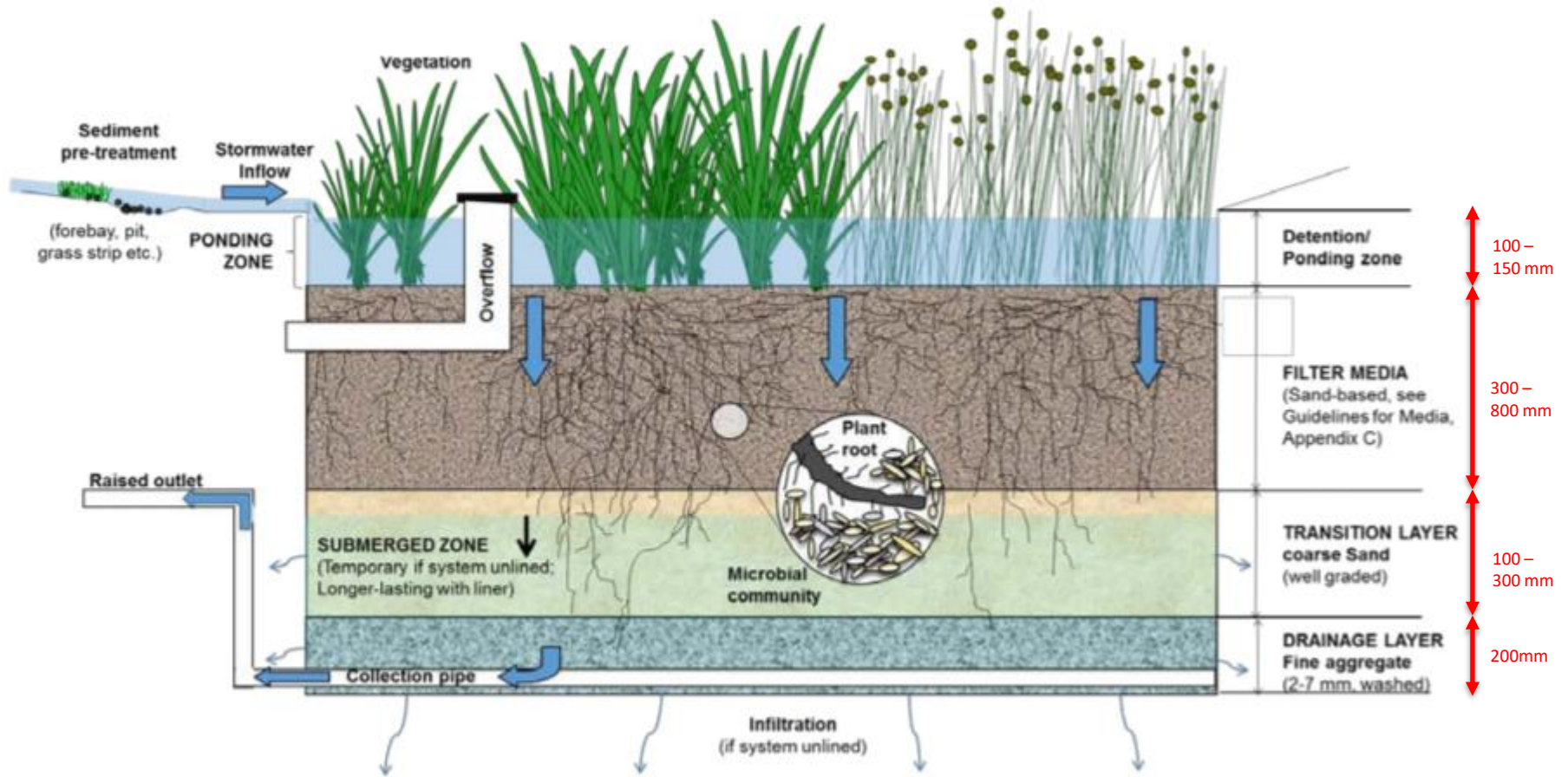


Figure 2 Main components of bio-retention systems

Source: Adoption Guidelines for Stormwater Biofiltration Systems Version 2, CRC for Water Sensitive Cities (2015).

How to construct a raingarden



Tips

1. Soil mix needs some clay (up to 3%) and organic matter (up to 5%) to retain moisture between rainfall events
2. If your raingarden is greater than 4m wide install two slotted drainage pipes (evenly spaced) and two overflow pipes

How to size your raingarden

Area of run-off (m²)	Area of raingarden (approx.) (m²)
50	1
100	2
150	3
200	4
250	5
300	6
350	7
400	8
450	9



Shopping list

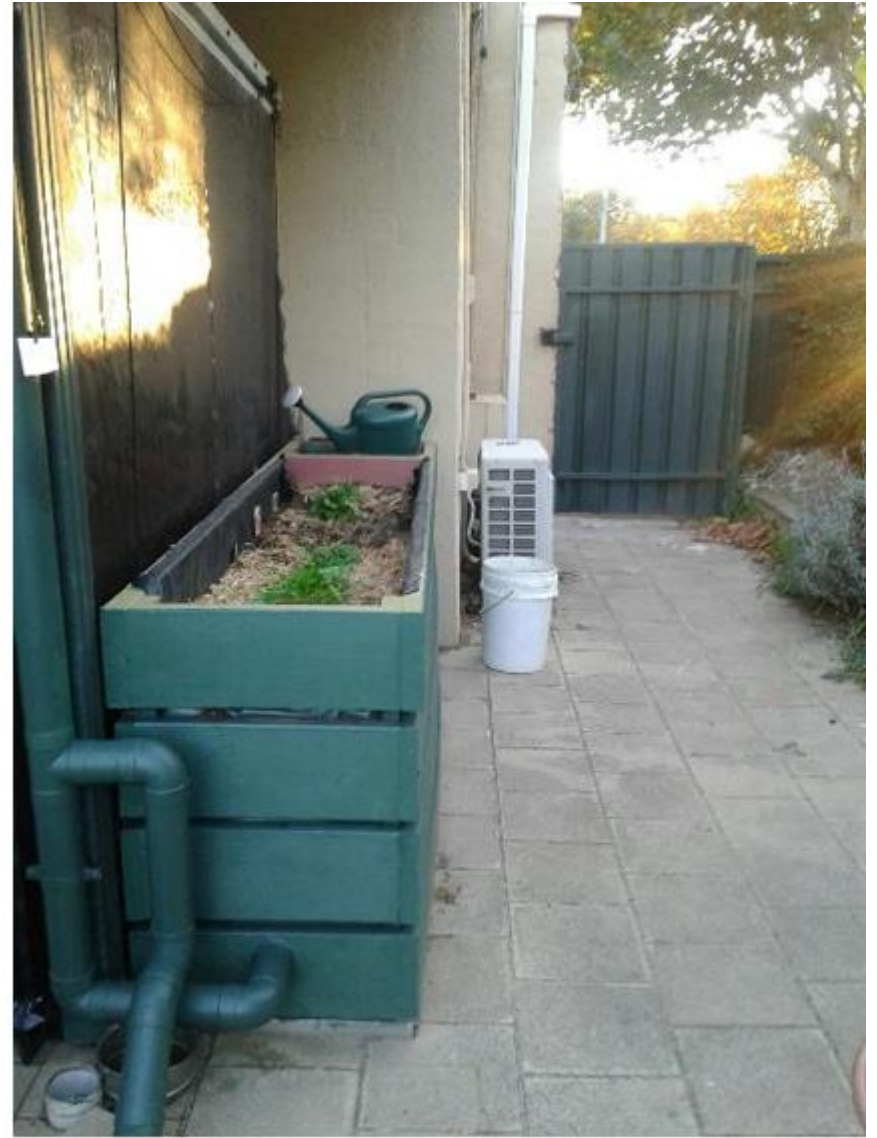


Shopping list

- Pond liner
- 2 x 90 mm x 1 m PVC pipe
- 50 mm slotted agricultural pipe – to suit – minimum 3 metres for 1 m²
- 2 x 90 mm T junctions
- 4 x 90x75x60x50x40 stormwater PVC stepped adaptor (Holman)
- 4 x 50mm couplings (Vinidex)
- 2 x elbow 90 degrees
- 1 x 90 mm PVC collar and cap and screen (with mesh to keep mosquitos at bay)
- Plus pipework to connect to downpipe
- Tape
- 20 mm gravel (for area at 200 mm depth)
- 4-7 mm screenings or pebbles (for area at 50 mm depth)
- Washed sand (for area at 100 mm depth)
- Sandy loam (for area at 400 m depth)

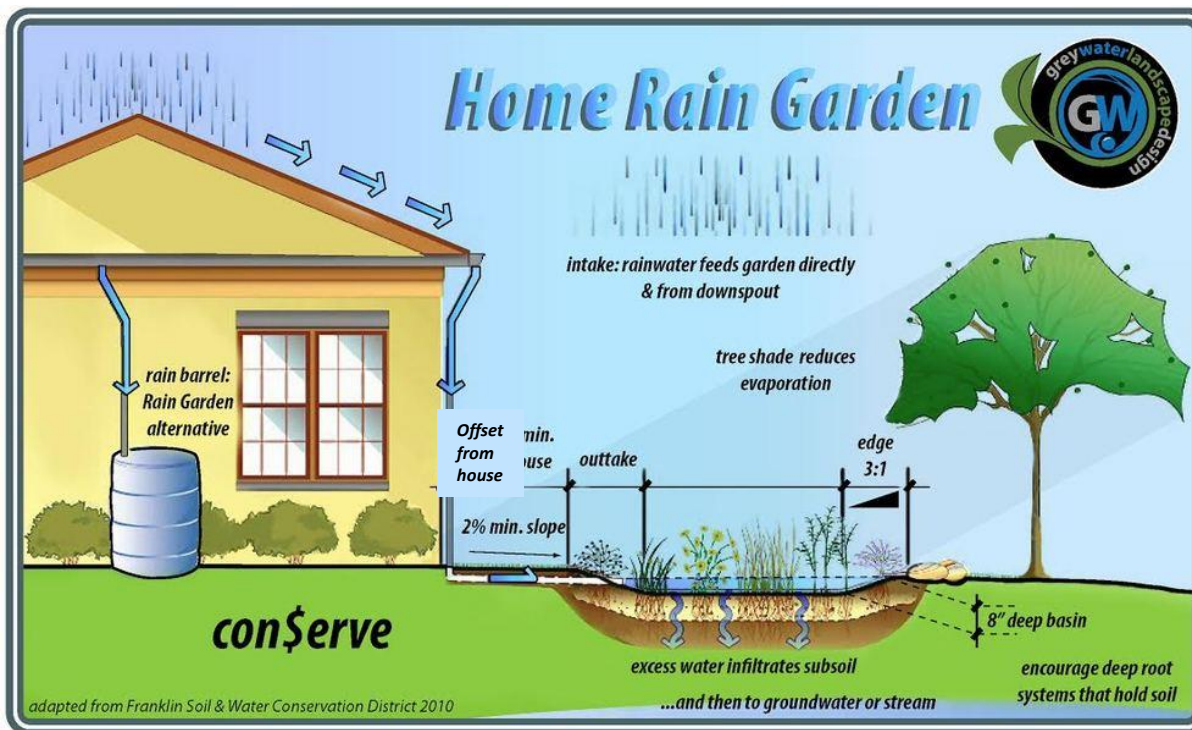
Tools

- Angle grinder
- Saw
- Stanley knife
- Pen
- PVC glue
- Ruler



Source: David Palmer

Raingarden (inground)



Source: greywaterlandscapedesign.com

Source: ccwater.com