

# Rainwater gardens

Rainwater tanks are not the only way you can capture water for your garden's benefit



## Raingardens

Raingardens capture the water, allowing it to seep into the soil slowly. They can include ponds or water features and can double as a home for frogs. Raingardens are designed to capture the flow of stormwater coming from paved areas, overflow pipes of rainwater tanks or direct from downpipes from the roof of the house. The raingarden typically has an overflow point to a stormwater drain for when there is really heavy rain for extended periods.

The garden should feature plants that can tolerate the soil going from very wet to periodically dry. Rocks or pebbles should be used as mulch, as these don't float when the water flows and end up clogging drains, but like timber mulch, they protect the soil from evaporation and suppress weeds.

So you have installed a rainwater tank and the greywater system is distributing water to your fruit trees, but there is another way to save water and keep your garden thriving that is often overlooked: stormwater. Rain that lands on the ground or driveways usually ends up going down the stormwater drain. Why not capture some of this water not only for the benefit of your garden, but to reduce the amount of rubbish and pollution that goes into the drainage system and eventually into the waterways.

According to Stuart McQuire, author of *Water Not Down the Drain*, the first thing you should do when looking at capturing stormwater is to watch your garden when it is raining.

"Get an idea of your garden to see where puddles are forming. Is there water simply running down hill or are there paved surfaces that are collecting water that could be redirected to the garden?" says Stuart.

"Once you have an idea of where the water is pooling or running off you can look at ways to capture this water for the benefit of your garden. Options include landscaping, creating a rainwater

garden, capturing the water in underground tanks or installing porous paving."

## Clever landscaping

Landscaping can be designed to direct water to areas where it can seep into the soil rather than running off the site. Swales are a way of landscaping your garden so that it catches as much rain as possible. Swales are hollows or ridges constructed along the contour of the slope to hold water as it runs down the slope. The water then seeps into the ground for the benefit of the plants.

In the home garden, swales can be subtle variations in the slope that are part of the landscaping without their function being obvious; wider swales can even be lawn areas. Plants or landscape features can also be used to help retain and filter the water, or they can be used to extend and enhance your swales. Swales are particularly good for retaining water for trees or deep rooted shrubs.





## Stormwater tips

- Use plants to help slow the flow of water
- Landscape your garden to divert water runoff to garden beds
- Create a rainwater garden to capture water and frogs
- Don't direct water close to footings of buildings or into your neighbour's property.
- Don't mix raintank water with stormwater as stormwater may contain contaminants

### Infiltration tanks

With a bigger budget you could even consider getting underground tanks that can be used to capture stormwater. Tanks can be constructed onsite to accept stormwater and allow infiltration of water from above through the ground. Surface drains or stormwater pipes can also direct stormwater into the tank. This water can then be used to irrigate the garden, or to flush the toilet if it is clean enough.

The tanks typically include a filter to screen out sediment, leaves and other debris from entering the tank. Initial filtration can be provided through landscaping using swales, raingardens, or reed bed filters. In assessing whether to install a storage tank for stormwater, consider the extent to which you can prevent contaminants like motor oil from driveways, dog poo, fertilisers and sediment. Prevention is a key to ensuring water quality.

### Porous or permeable paving

While you're probably not going to rip up your concrete driveway just to do this, porous paving is something to consider when you are putting new paving in. Porous paving can have the same stability and function as non-porous paving, but it allows water to seep through into the ground. Trees or other plants near the paving will benefit from this water.

Porous paving can be permeable concrete pavers or pebble pavers that look similar to conventional pavers. Or it can be concrete grid paving or modular plastic pavers that form a matrix. Each of these allows water to filter through voids filled with sand, gravel or grass. Sand or gravel is typically used below the paving to increase the infiltration rate of the water. A gravel layer below porous or permeable pavers can function as a storage tank or it can drain to a separate tank. Stormwater drains can also be used below the paving to remove excess water when infiltration areas are full.

Other options for paving materials include using gravel for paths or driveways, and there are some forms of asphalt that allow water to seep through to the ground. Sections of porous paving can be used in conjunction with non-porous paving to allow infiltration in particular areas.

#### For more information:

**Water Not Down the Drain**  
[www.notdownthedrain.org.au](http://www.notdownthedrain.org.au)

**Your Home**  
[www.yourhome.gov.au](http://www.yourhome.gov.au)

**Water Sensitive Urban Design**  
[www.wsud.org](http://www.wsud.org)  
[www.wsud.melbournewater.com.au](http://www.wsud.melbournewater.com.au)

**Healthy Waterways**  
[www.healthywaterways.org](http://www.healthywaterways.org)