

Building a raingarden



Building a raingarden is a simple way to help the environment and the health of our local waterways while providing a self-watering garden for your backyard.

Why build a raingarden?

A raingarden resembles a regular garden with one major difference – it is positioned to receive rain and stormwater from hard surfaces such as a downpipe from a roof, paved areas or roads.

Anyone can make a raingarden. They are a creative, low cost and easy to maintain way in which you can make better use of rain and stormwater that falls on your property while helping your local environment.

Please note: A certified plumber must be used for stormwater connections and modifications.

What is a raingarden?

Raingardens come in many different shapes and sizes. The main styles of home raingardens include:

- infiltration
- inground
- native species planter box
- swale
- vegetable planter box.

Using layers of soil, gravel for filtration and typically planted with a combination of local native shrubs and grasses, a raingarden reduces the amount of run-off that would otherwise wash pollutants into the stormwater system and our rivers and creeks.

While most raingarden styles traditionally receive rain and stormwater run-off on the surface, a vegetable raingarden is sub-irrigated, which means that water enters at the base of the raingarden. This helps to prevent the vegetables being submerged after heavy rain and allows water to be used more efficiently as there is less evaporation from the soil surface.

How a typical raingarden works

1. Rain and stormwater wash pollution and excess nutrients into raingarden.
2. The water spreads throughout the raingarden where plants use up these nutrients.
3. As this water seeps down through the layers of the raingarden, sediments and pollutants are trapped.
4. Filtered stormwater is then collected in pipes and flows to local waterways.

Which native plants to use?

A wide range of native species are suitable for raingardens and your local nursery can guide you on what is right for your area. When choosing local native plants for your raingarden make sure that they:

- are able to tolerate short periods of inundation followed by longer dry periods
- are perennial rather than annual
- have deep fibrous root systems
- can form understorey if grown with shrubs and trees overhead.

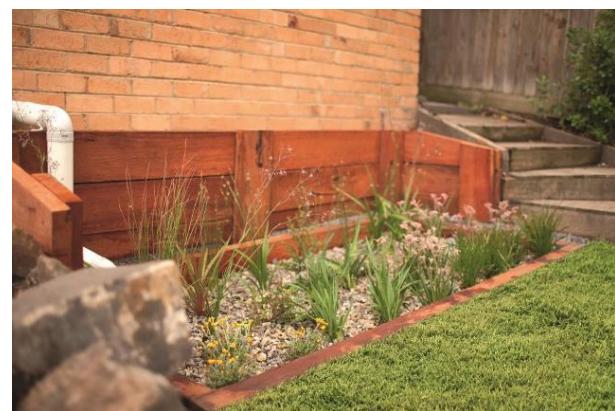
There are some native plants that are really good at removing pollutants from stormwater.

These include:

- Everlastings (*Chrysocephalum apiculatum*, *C. semipapposum*, *Helichrysum leucopsideum*)
- Hop Goodenia (*Goodenia ovata*)
- Kidney Weed (*Dichondra repens*)
- Knobby Club-rush (*Ficinia nodosa*)
- Lemon Beauty-heads (*Calocephalus citreus*)
- Rush grasses (*Juncus flavidus*, *J. kraussii*, *J. pallidus*, *J. subsecundus*)
- Sedges (*Carex appressa*, *C. inversa*)
- Small-fruit Fan-flower (*Scaevola albida*).

About 50% of your raingarden should be planted with species like these*, the other 50% can be made up of plants that like a drier environment with intermittent wet periods.

*For a full list of recommended raingarden native species for Adelaide check EPA SA and Water Sensitive SA websites or ask a native nursery grower what grows best in your area (see overleaf for contact details).



Inground raingarden
Image supplied by Melbourne Water



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How a vegetable raingarden works

1. A planter box vegetable raingarden can collect roof water from a diverted downpipe.
2. Whilst a typical raingarden receives rain and stormwater run-off at surface level, a vegetable raingarden is sub-irrigated.
3. Water entering the base of the raingarden prevents the vegetables being submerged after heavy rain.
4. Water is used more efficiently as there is less evaporation from the soil surface.

A wide range of vegetables can be grown in your raingarden including tomatoes, beans, lettuce, spinach, cucumber, beetroot, onions and leeks. Herbs such as basil and parsley should also grow well. When selecting which vegetables to plant, consider:

- whether it is the best time of year to plant
- the sun/shade and space requirements of individual types of plants.

Tips for a healthy raingarden

Raingardens are low maintenance, especially when planted with native plants. However, a few simple tips can help your raingarden to mature and function well:

- Weed regularly until plants have matured.
- Evenly distribute water flow into your garden to limit erosion from heavy rainfall. Strategically placed rocks may help with this.
- Inspect your garden regularly – prune or replace plants and repair surface erosion in your garden if necessary.

Coming soon...

We are adapting Melbourne Water's fact sheets on home raingardens, for Adelaide, with Water Sensitive SA. Visit our website soon for more information about raingardens or to download detailed instructions on how to build your own raingarden.

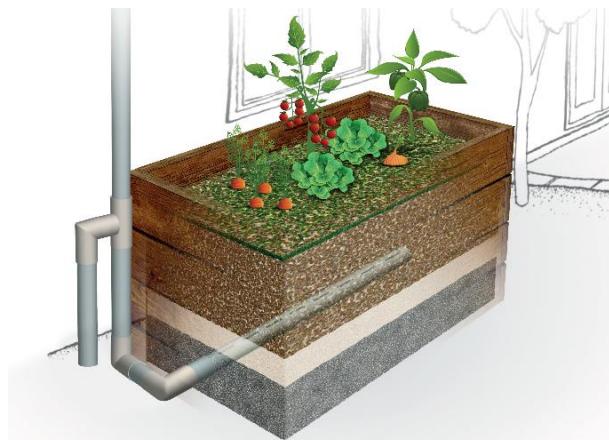
Why a backyard for wildlife?

In Australia, gardening has been recognised as one of our favourite pastimes. What we do in our home gardens has the potential to benefit or harm the natural environment.

By developing and maintaining a garden that follows the five basic Backyards 4 Wildlife principles you will contribute to a better local environment, help conserve our flora and fauna, create important habitat, reduce your maintenance costs, and reduce the threat of invasive weeds.

Top 5 tips

1. Use plants native to your suburb.
2. Plant species that are a range of heights.
3. Use mix of local native plants that flower throughout the year.
4. Manage your pets responsibly.
5. Minimise chemical use.



A vegetable raingarden
Image supplied by Melbourne Water

More information

Environment Protection Authority South Australia
www.epa.sa.gov.au

SA Water www.sawater.com.au

Water Sensitive SA visit the Biofiltration webpage
www.watersensitivesa.com or phone 0431 828 980

Visit the urban biodiversity page of our website to access more Backyards 4 Wildlife information and contact details for specialist native plant nurseries.

www.naturalresources.sa.gov.au/adelaidemtloftyranges

Or contact your nearest Natural Resources Centre

Black Hill

115 Maryvale Road, Athelstone, SA 5076
P (08) 8336 0901

Eastwood

205 Greenhill Road, Eastwood, SA 5063
P (08) 8273 9100

Gawler

8 Adelaide Road, Gawler South, SA 5118
P (08) 8523 7700

Willunga

5 Aldinga Road, Willunga, SA 5172
P (08) 8550 3400

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