

Installing a Waterwise Garden



Lawns are great where they are actively used but we often plant them in our front gardens where they are seldom used. Replacing your thirsty lawn with a waterwise garden is a great way to save our precious water resources and provide habitat for local wildlife.

This information sheet provides advice on how to go about it.

Busselton Water have recently installed a rainwater tank and waterwise demonstration garden at their main office on the corner of Fairbairn Road and Camilleri Street. Come down and get inspired!

Removing the lawn

There are several ways to get rid of an old lawn. We chose to use steam to kill it and a bobcat to remove it. You may choose to retain all that organic matter to improve the soil.



Another common method is sheet mulching which involves the following steps

- Mow the lawn very close to the ground and leaving the clippings on top
- Add a wetting agent if the soil is water repellent
- Spread a layer of manure over the lawn (optional)
- Water thoroughly to encourage the lawn to break down
- Lay cardboard or newspaper over the top ensuring that all the edges overlap by 10cm and wet thoroughly
- Top with compost (optional) and a thick layer (5-10cm) of mulch (essential).



Either wait for the paper and lawn to decompose or cut holes to plant plants.

Garden Design

It is worth putting some time into planning your garden before you begin. Think about the look you want and allow for the size of the plants when they mature.

Hydrozoning

Plants should be grouped based on their water requirements. This may be by planting beds of plants with similar water requirements or modifying your reticulation system so that plants with similar water needs are on the same station.

Plant Selection

Choose plants that thrive on minimal water so that your garden looks good all year round. There are many great local native species which are adapted to the local climate. They will probably need some water to help them survive the first summer and a top up during particularly long hot, dry spells.



There are a number of useful guides to help with the plant selection and design including GeoCatch's *Bay OK Garden Guide for Geographe Bay* (<http://geocatch.asn.au/wp-content/uploads/2014/12/Bay-OK-Garden-Guide.pdf>), South West Catchment Council's *Coastal Gardens- a planting guide for Geographe Bay* (http://dynw3d2sumeia.cloudfront.net/uploads/media/documents/2014/03/14/Geographe_Bay_Coastal_Gardens_Guide_FINAL.pdf) , *Popular garden designs for Perth and the South West* from

WaterCorp (<http://www.watercorporation.com.au/save-water/in-the-garden/garden-design/popular-garden-designs-for-perth-and-the-south-west>).



If you are considering installing a new verge garden then make sure you read the City of Busselton's *Nature Verge* booklet. It contains an application form and all the information to make sure the garden does not become a hazard along with some helpful advice (<http://www.busselton.wa.gov.au/Environment-Waste/Environmental-Planning/Biodiversity/Nature-Verge>). Contact the City to find out about their free street tree program.

Design elements

The use of features such as rocks and pieces of timber or feature plants can really add to a waterwise garden. Incorporate art into your garden to reflect your personality or provide a birdbath and enjoy all the visitors it brings. Think about access through the garden and whether you want some footpaths or parking areas.



Mulch

Mulch looks great and provides many benefits to the garden. It reduces evaporation from soils, which means the soil around plant roots stays moist for much longer. It also insulates the soil keeping it cooler in summer and warmer in winter which reduces the stress on plants. As it decomposes it provides slow release fertiliser for plants and improves the soil health through the addition of organic matter. Mulch also suppresses the growth of weeds in the garden.

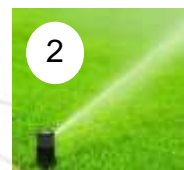
Apply a 5-10cm thick layer of mulch over garden beds. If you are watering above the mulch make sure it is a very coarse mulch (such as shredded pine bark) to allow water to penetrate. Don't use black mulch as it will get too hot in summer and bake the soil and plants. Leave a gap around the base of plants so that they don't harbour diseases.

Irrigation

If your plants require extra water, choose the type of sprinklers that best suit your plants needs without wasting water.

Lawn

Use rotary sprayers (1) for smaller areas or gear drive rotators (2) for large areas to minimise the loss to evaporation. Ensure the sprinklers spray head to head and provide even coverage. Use catch cups (3) to measure how much water is being delivered by your retic and whether the water is being spread evenly. Aim for 10mm for lawns on sandy soils per watering.



Garden Beds

Use drippers under mulch to deliver moisture straight to the root zone and retain the moisture for longer. Micro-sprayers are prone to breaking and lose a lot of the water to evaporation. They are not recommended for a waterwise garden. If drippers don't suit your garden use rotary sprayers (1).



Soil Improvement

Wetting Agents

Sandy soils are particularly prone to being water repellent. If water runs off the surface of your soil rather than soaking in it is definitely worth adding a soil wetter.

Soil Conditioners

Soil conditioners and composts provide broken down organic matter to the soil which will improve the water and nutrient holding ability of the soil. You may just choose to mix some into the holes where you plant your plants rather than over the whole area.

Clays can be added to sandy soils to improve the water and nutrient holding ability. Most plants prefer soils to be neutral to slightly acidic (pH test kits are available at most garden centres). Lime can be added to acid soils and sulphur can be added to alkaline soils. Alternatively choose plants adapted to your soils natural pH.

Fertilisers and Manures

Minimise the use of fertilisers to protect the surrounding environment. A small amount of slow release fertiliser



and/or a handful of sheep manure sprinkled around the base of new plants can help them as they are getting established. Using soil conditioners will greatly decrease the amount of fertiliser required by your plants and the amount that escapes to the surrounding environment.



Maintenance

Keep your garden looking great by weeding it and pruning or replacing plants as needed. Top up the mulch as it decomposes, particularly in the lead up to summer. Check any reticulation for leaks and broken parts and review the run times so that you aren't over watering. Make sure you only water on your allocated days and turn the reticulation off over the winter months.