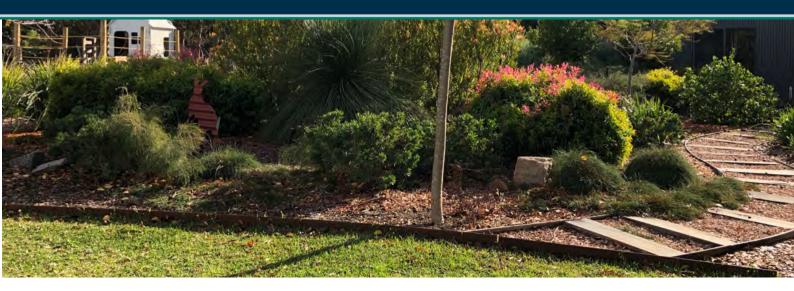
# GARDENS FOR NATURE Nature Conservation Information Sheets





## You can help nature in your garden

You can help nature in your garden. Nature Conservation's Gardens for Nature Information Sheets below provide gardeners with the advice needed to plan and grow a Garden for Nature.

This document provides a set of all the Gardens for Nature Information Sheets for download. The Information Sheets can also be downloaded individually using the links on Nature Conservation's website Help Nature in your Garden. You can also contact the Nature Conservation Office on 9757 2202 and speak with a Biodiversity Officer if you have specific questions about your garden.

The following Information Sheets are provided in this combined document:

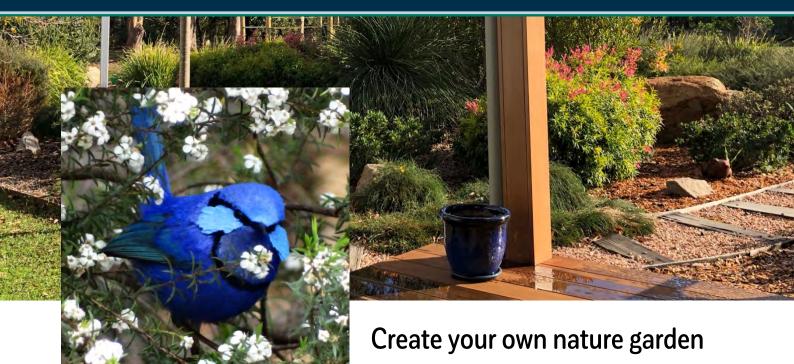
- Gardens for Nature
- Gardening with Natives Plants
- Wildlife Friendly Gardens
- Gardens for Birds
- Attracting Beneficial Insects
- Waterwise Gardens
- Rat Control and Local Wildlife

If you own a bush block or larger semi-rural or rural property check out our Bushland Management Information Sheets or visit our Help Nature On Your Property website page.



# GARDENS FOR NATURE Nature Conservation Information Sheet





Home gardens provide a fantastic opportunity to recreate habitats for our local wildlife. Have a go at creating your own nature inspired garden and enjoy seeing the locals drop in for regular visits.

## **Planting Natives**

The south west of Western Australia is recognised internationally as a biodiversity hotspot. We have a huge range of plants already adapted to our local climate, which is great news for gardeners as they are much more likely to thrive with minimal attention.

Try to select a range of shapes and sizes from trees through to shrubs and groundcovers. Also choose plants with different flowering times so that you always have something in flower. You can do this by visiting your local nursery during each season and selecting the plants in flower.

For more information see <u>Gardening with Native Plants</u>, <u>Revegetation with Local Natives</u>, <u>Plant This Instead</u> and the Guide to the Flora and Fauna of the Cape to Cape Region

## **Avoiding Weeds**

Weeds are a huge threat to our forests and local areas of natural beauty. Don't plant them in your garden and remove any that are already there before they spread. NEVER dump your lawn clippings or garden waste in the bush.

For more information see <u>Managing Environmental Weeds</u> and <u>Woody Weeds of the Cape Naturaliste to Cape Leeuwin Region</u>

## **Encouraging Wildlife**

Gardens can be a haven for local wildlife. From birds and butterflies to lizards and frogs, we can design our gardens to encourage these special guests. When designing your garden for wildlife:

- Provide a source of clean water.
- Plant the plants they like to eat or that will attract the food they like to eat.
- Keep pets under control and ALWAYS keep them in at night.
- Provide safe nesting boxes.

You may even be lucky enough to have quendas and possums visiting your garden. For more information see Wildlife Friendly Gardens and Gardens for Birds.



## **Attracting Beneficial Insects**

Beneficial insects provide pollination and pest control for your garden so welcome them in with a few key features:

- Warm sunny spots
- Mulch and leaf litter
- A water source where they can drink from without drowning
- Most insects can't see red so make sure you plant plenty of blue, purple, white and yellow flowers to bring them in
- Consider installing a few bee hotels

Having insects in the garden will also attract many of the small wrens and robins. For more information see <a href="Attracting Beneficial">Attracting Beneficial</a> Insects.

## **Avoiding Chemicals**

Avoid using chemicals in your home and garden as these can have unintended consequences for visiting wildlife and beneficial insects. Research natural alternatives and let nature take control in the garden.

## **Being Waterwise**

Saving water in the garden helps to conserve a precious resource and puts less pressure on the local environment. Consider these ways to reduce your water use:

- Limit areas of lawn and plant natives to reduce your garden's water demand
- Divide your garden into hydrozones based on the watering needs of the plants
- Install a greywater system and a watertank as alternative water supplies

For more information see Waterwise Gardens.



This Information Sheet is funded by the Australian Government's National Landcare Program Photos provided by Dr Boyd Wykes, Green Tree Naturopathy, Drew McKenzie and Katie Biggs



## DESIGNING YOUR OWN GARDEN FOR NATURE

## Key things to consider



Plant a diverse array of native plants including layers of trees, shrubs and groundcovers

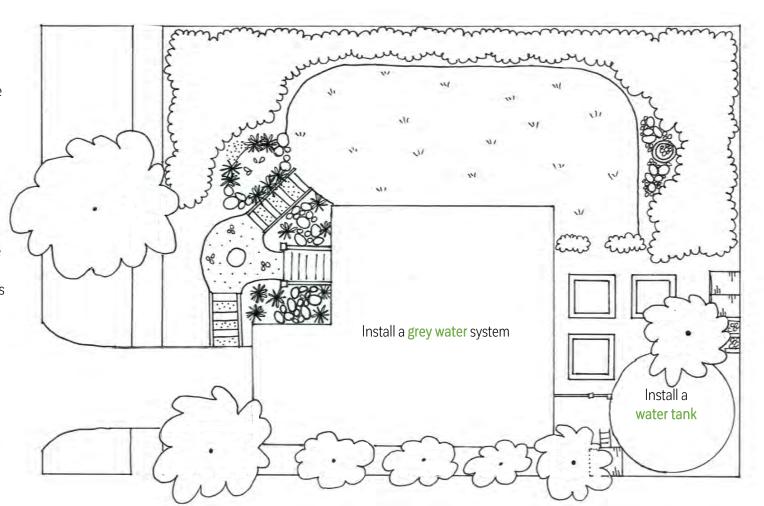
Install a frog pond

Limit lawn to where you will use it Apply thick mulch to gardens beds

Include piles of rocks and logs in landscaping to encourage insects and local wildlife

Establish a native verge garden and encourage the neighbours to do the same

Careful
placement of
trees will
provide shade
and reduce
water demands
in summer



Provide a variety of water stations for wildlife – deep, shallow, high and low

Divide the garden into hydrozones based on the water and nutrient needs

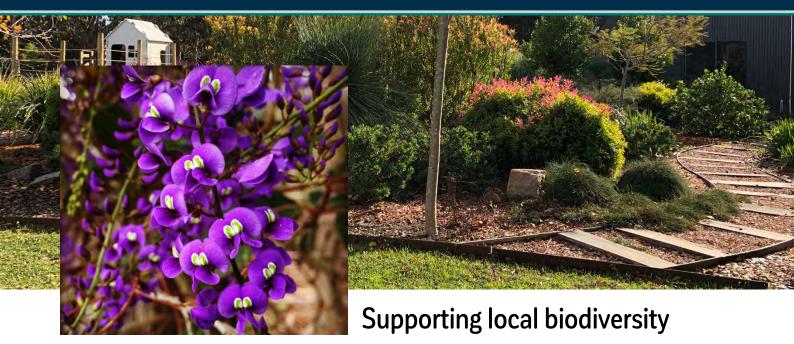
Vegies and exotics have high water and nutrient needs

Use pots and wicking beds to minimise any leaching of fertilisers into waterways

Make your own compost with food and garden waste

# GARDENING WITH NATIVE PLANTS Nature Conservation Information Sheet





Planting local native species in your garden is a great way to support local biodiversity. Gardening with natives also requires less water, nutrients and maintenance, which is better for us and better for the environment.

## **Planting Natives**

The south west of Western Australia is recognised internationally as a biodiversity hotspot. We have a huge range of plants already adapted to our local climate, which is great news for gardeners as they are much more likely to thrive with minimal attention. For comprehensive information on planting local native species see Revegetation and Native Gardens (link).

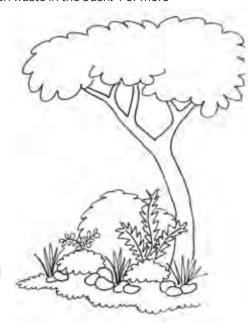
## **Avoiding Weeds**

Weeds are a huge threat to our forests and local areas of natural beauty. Don't plant them in your garden and remove any that are already there before they spread. NEVER dump your lawn clippings or garden waste in the bush. For more information see Managing Environmental Weeds.

## **Creating Diversity and Structure**

Plant a range of plants to provide visual interest and diversity of habitats, food and shelter for local wildlife such as small mammals, birds, insects, frogs and lizards.

- Try to select a range of shapes and sizes from trees through to shrubs and groundcovers.
- Think about the layers you want it achieve and select plants based on their expected shape and size.
- It is good to have a few of each plant as this will provide consistency in the style and ensure a good supply of resources to your garden visitors.
- Select plants with different flowering times so that you always have something in flower. You can do this by visiting your local nursery during each season and selecting the plants in flower.



#### **Trees**

Trees really give the garden a sense of space and make it feel established. If you are lucky enough to already have mature trees make sure you protect them. Think about the placement of trees and the shade they will create.

- Use trees to the west to provide protection from the hot afternoon sun in summer
- Trees to the south will cool the summer breeze
- Keep the northern side of the garden more open to allow the winter sun in

Peppy trees are a key species for our local animals, birds and insects so try to include some in your garden design. Other local trees to consider include

Tall TreesSmall to Medium TreesKarriBanksiasMarriMelaleucasJarrahSheoaksBullichAcacia salignaYarri (Blackbutt)Taxandrias

#### Nurseries with local plants:

#### **Tube Nursery**

8 Blond St, Cowaramup
Phone: 9755 5509 / 0417 936 946
Email: <a href="mailto:tube\_nsy@bigpond.net.au">tube\_nsy@bigpond.net.au</a>
www.tubenurserv.com.au

## Geographe Community Landcare Nursery

366 Queen Elizabeth Ave, Ambergate Phone: 0429 644 885

Email: gcln@westnet.com.au www.geographeplants.com

#### **Boyanup Botanicals**

Lot 14 South West Highway, Boyanup

Phone: 9731 5470

www.boyanupbotanical.com.au

### **Shrubs**

Medium to large shrubs provide a great sense of volume and depth in the garden. Use them as a visual screen to create privacy.

- Consider how big shrubs are likely to grow when choosing where and how close to plant them
- Prune natives regularly to encourage new growth and keep them looking good
- Quiet shrubby areas in the garden offer shelter to small birds and animals

Here are some local native suggestions based on their flower colours

White Flowers	Yellow Flowers	Orange and Red	Pink, Purple and Blue
Astartea	Acacia	Adenanthos	Alogyne
Hakea	Eutaxias	Beaufortia	Hovea
Melaleuca	Bossiaea	Boronia	Hypocalymma
Myoporum	Hibbertia	Calothamnus	Kunzea
Olearia	Viminaria	Darwinia	Verticordia
Ricinocarpos		Templetonia	
Trymalium			

## **Smaller Plants and Groundcovers**

Try these small shrubs, strappy plants, climbers and groundcovers to add variety, colour and interest to the garden.

Small Shrubs	Strappy Plants	Climbers	Groundcovers
Chorizema	Anigozanthos	Billardiera	Carpobrotus
Hibbertia	Baumea	Clematis	Centella
Lechenaultia	Conostylis	Hardenbergia	Dampiera
Leucophyta	Dianella	Kennedia	Dichondra
Pimelea	Ficinia	Thysanotus	Hemiandra
Thomasia	Lepidosperma		Hibbertia
Thrypomene	Orthrosanthus		Scaevola
Tremandra	Patersonia		



This Information Sheet is funded by the Australian Government's National Landcare Program Photos provided by Laura Bailey, Green Tree Naturopathy, Cass Jury and Katie Biggs



## WILDLIFE FRIENDLY GARDENS Nature Conservation Information Sheet





Home gardens provide a fantastic opportunity to recreate habitats for our local wildlife. From lizards and frogs to quendas and possums, find out how to encourage these visitors to your own garden and what you can do to keep them safe.

## **Planting Natives**

Plant a variety of local native species to best provide for the needs of local wildlife. Include a range of shapes and sizes from trees through to shrubs and groundcovers.

- Trees provide safety for possums and other small climbing mammals
- Thick shrubby areas provide shelter and a safe retreat for ground dwelling animals
- Select plants that cater for seed eaters, nectar lovers and insectivores

Aim to have something in flower in the garden throughout the year. You can do this by visiting your local nursery during each season and selecting the plants in flower. For more information see <u>Gardening with Native Plants</u>.

## Responsible Pet Ownership

If your garden is visited by local wildlife you need to make sure your pets are not posing a threat. Domestic animals can have a significant impact on local wildlife.

- Always keep pets in at night
- Don't allow them to roam the neighbourhood
- Feed pets indoors so they aren't sharing their food with wildlife

#### **Possums**

The critically endangered Western ringtail possum is only found in the south west. Their preferred habitat is the peppy woodlands which have now largely been converted into urban areas.

- Plant peppy trees in your garden to provide vital habitat
- Preserve mature trees in the garden for possums to travel through, nest in and feed on without having to come down to the ground
- Consider adding some possum boxes to your garden



## Quendas

Quendas require a densely vegetated area to provide suitable habitat.

- Thick mulch will encourage the fungi, worms and beetles that guenda feed on
- Place a saucer of water at ground level next to thick vegetation to allow them to drink safely
- Provide hollow logs or tubes as a safe retreat to hide from predators.

A pallet laid down on the ground and camouflaged in the garden will provide a simple shelter

### Lizards

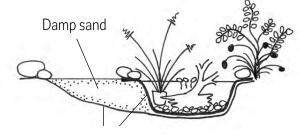
Encouraging lizards to take up residence in the garden keeps the snakes and mice away. King skinks feed on mice and will attack snakes that enter their territory.

- Sunny areas with rocks provide somewhere for lizards to warm themselves
- Hollow logs, tubes or pallets provide a safe place for them to hide from predators

## **Frogs**

Garden water features can provide fabulous frog habitat. Here are a few hints on how to design a frog friendly pond.

- Provide plenty of logs, rocks and plants for your frogs to hide amongst.
- Your pond should include floating plants, emergent plants and overhanging plants. This will keep the water cool and oxygenated and provide food and shelter for frogs and tadpoles.
- Some frogs require moist soil rather than open water to burrow and breed. These areas are also attractive to insects as a safe place to drink without drowning – particularly butterflies and bees.



Plastic liners

If you are worried about mosquito larvae, introduce some local native fish into your pond. Unlike many exotic freshwater fish, native species will eat the insects without attacking the eggs or tadpoles. Ask for Western Pygmy Perch, Western Minnow or Swan River Goby at your local pet shop.



This Information Sheet is funded by the Australian Government's National Landcare Program Photos provided by Dr Boyd Wykes, Steve Castan, Cass Jury, Drew McKenzie and Katie Biggs



## **GARDENS FOR BIRDS**

## **Nature Conservation Information Sheet**





When it comes to birds, the structure of the garden is more important than the species used. Native gardens can attract and support a wide range of birds if they follow a few key design principles.

## **Creating Habitat**

A range of habitats is really important. Try to provide as many of these features in your garden as possible.

- Warm, sunny spots with piles of rocks, mulch and logs for insect foraging
- Shady areas to provide relief in the heat of summer
- Quieter, bushy areas for nesting and sheltering smaller birds
- Trees as safe lookout spots and elevated nesting sites

If you are lucky enough to have any mature trees on your block try to preserve them as they provide a range of benefits for birds, especially those with hollows.

## **Providing Water**

Bird baths are a vital addition to your native garden and provide endless entertainment.

- Placing your bird bath against a shrubby area will encourage the shier species
- A few rocks emerging from the water will help the smaller and younger birds to get in and out of the water safely.
- Dappled shade will keep the water cool in summer and remember to refresh the water regularly and keep them topped up.

Trial some different styles in various locations to see what your birds prefer – high, low, deep, shallow, large or small.

## **Selecting Plants**

Aim to have something in flower in the garden throughout the year and remember to cater for seed eaters, nectar lovers and insectivorous birds.

- Avoid the large red nectar filled grevilleas and bottle-brushes as these will attract the more aggressive honeyeaters who are likely to scare off other birds.
- Choose species with much smaller flowers as these are likely to attract the smaller, less territorial honeyeaters.
- If you want to attract the wrens, fantails, robins and whistlers, you need to plant insect attracting species. Most insects can't see red so make sure you plant plenty of blue, purple, white and yellow flowers to bring them in. See Attracting Beneficial Insects for more information.
- Plant species with abundant seeds to attract parrots, cockatoos, firetails and bronze wings.
- Resist the urge to provide food for birds. They are much healthier feeding on the flowers, seeds and insects in your garden.

#### What to plant for...

Nectar lovers	Insect eaters	Seed eaters
Grevilleas (small flowered) Adenanthos Banksias Kangaroo paws	Native daisies and everlastings Eucalypts Local wattles and native peas Tea trees and Melaleucas	Rushes and sedges Eucalypts and peppies Wattles Native peas



## **Installing Nest boxes**

It takes a long time for trees to develop the hollows needed by some of the larger birds to nest. Consider installing a range of nest boxes in different sizes to cater for different species (see <a href="https://www.birdsinbackyards.net/Nest-Box-Plans">www.birdsinbackyards.net/Nest-Box-Plans</a>).

Don't tidy too much! Birds use twigs, grass, leaves and spiderwebs to create their nests. You could also leave out some materials for birds to line their nests such as untreated wool or pet hair.

### Resources

There is a vast amount of information available on the web. Follow these links to find out more....

http://www.birdsinbackyards.net/places

https://www.sgaonline.org.au/attracting-birds-to-your-garden/

http://www.birdlife.org.au/



This Information Sheet is funded by the Australian Government's National Landcare Program
Photos provided by Dr Boyd Wykes and Katie Biggs



## ATTRACTING BENEFICIAL INSECTS Nature Conservation Information Sheet





Home gardens provide a fantastic opportunity to recreate habitats for our local wildlife – including insects. Beneficial insects provide a range of services in the garden including pollination and pest control. Insects also provide an important food source to many small native birds and mammals.

## **Planting Natives**

Most insects can't see red so make sure you plant plenty of blue, purple, white and yellow flowers to bring them in. Choose plants with prolific flowers and a range of flowering times so food is always available. Remember that choosing local native species to plant in your garden is the best way to support our local insects.

#### What to plant

Some popular insect attracting natives are...

Local native daisies

Eucalypts

Hakeas

Spyridium (basket bush)

Tea trees and Melaleucas

Hardenbergia and other peas

Local wattles

Butterflies in particular are attracted to...

Jacksonia sternbergiana

Grevillea crithmifolia

Geraldton wax

Acacia saligna and cyclops

Pimeleas

Native grasses

## **Avoiding Chemicals**

Avoid using chemicals in your home and garden as these can have unintended consequences for your beneficial insects. Research natural alternatives and let nature take control in the garden.

## **Creating Habitat**

A variety of habitats are required by the various insect lifecycle stages.

- Thick mulch and piles of logs and rocks provide great insect habitat
- Some sheltered shrubby areas are important to escape the weather and lay eggs
- The thick bark on old trees can house a host of critters

## **Building Bee Hotels**

Why not install a few bee hotels to encourage insects to become permanent residents.

- Drill holes of various sizes in logs and clay bricks
- Bundle up some lengths of bamboo



## **Water and Sunshine**

Butterflies in particular need warm sunny spots that are sheltered from the wind. Locate small piles of rocks and pebbles to catch the early morning sun.

Many insects need to drink but can drown in deep water

- Fill a container with pebbles then add water so that they can safely land and drink without drowning
- Damp sand is preferred by many butterflies and bees so think about incorporating a sandy beach into a water feature (see the Wildlife Friendly Gardens for details)
- Floating plants can also provide a safe place for insects to drink from

### Resources

For more information follow these links

https://perthzoo.wa.gov.au/butterfly-friendly-gardens

https://www.sgaonline.org.au/butterflies/

https://blog.csiro.au/how-to-make-your-garden-native-bee-friendly/

https://www.aussiebee.com.au/index.html



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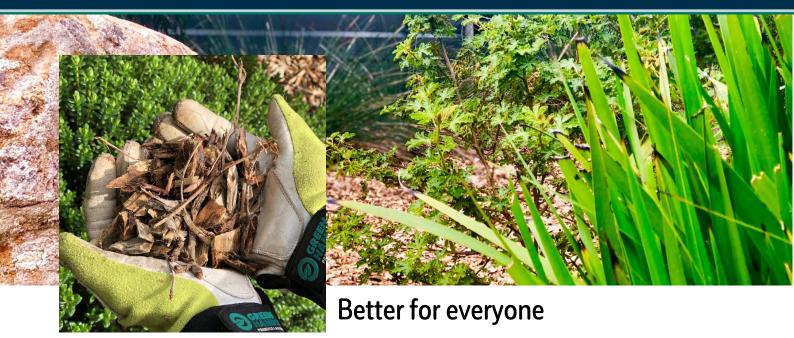
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## **WATERWISE GARDENS**

## **Nature Conservation Information Sheet**





Saving water in the garden saves you money and helps to conserve a precious resource, putting less pressure on the local environment. Here are some tips on how to create your own waterwise garden.

## **Planting Natives**

Gardening with natives requires less water, nutrients and maintenance, which is better for us and better for the environment. We have a huge range of plants already adapted to our local climate, which is great news for gardeners as they are much more likely to thrive with minimal attention.

Try to select a range of shapes and sizes from trees through to shrubs and groundcovers. Think about where you need shade or privacy in the garden and provide that with trees or large shrubs. For more information see planting a native garden.

## **Creating Shade**

Use local trees such as peppies, melaleucas and gums to provide natural cooling and shade, especially on the western side of your garden to moderate the hot afternoon sun and to the south to cool the summer breeze. Consider using deciduous trees to the north of your house to provide shade in summer and allow some winter sun in.

## **Limiting Lawn**

Lawns can be very hungry and thirsty and it takes a lot of effort to keep them looking good.

- Limit areas of lawn to where you will use them
- Edge them with a physical barrier so that you don't need chemicals to keep the runners out of your garden beds.
- Only feed your lawn during autumn and spring and not when rain is forecast.
- Overfeeding the lawn just means more mowing for you and more fertilisers washing into our rivers causing toxic algal blooms.
- NEVER dump your lawn clippings or garden waste in the bush.

## **Developing Hydrozones**

Divide your garden into hydrozones based on the watering needs of the plants.

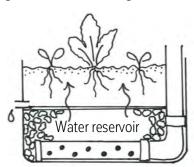
- Native gardens often require regular water through the first summer but require very little once established. Consider using drippers or hand watering.
- Lawns are thirsty and require regular water through hot, dry spells to keep them looking good. Use fixed spray, rotary or gear sprinklers to provide even watering without overspray.
- Productive plants and exotics generally have high water and nutrient needs and should ideally be kept in containers to minimise the leaching of nutrients into the environment. Use drippers, wicking beds or hand water.

Set up your watering stations based on these hydrozones and adjust according to the weather and the season.

## **Container Gardening**

Exotics, fruit and vegetables with high water and nutrient needs are best grown in pots or wicking beds to minimise their water demands and any nutrients leaching into the environment. Make sure your wicking bed has the following features

- Waterproof liner or container
- A watering pipe and slotted pipe to keep the water reservoir topped up
- Gravel or blue metal to fill the reservoir
- A layer of geotextile or shade cloth between the water reservoir and the soil
- No more than 30cm of soil above the water reservoir so that the wicking action can reach the plants
- An overflow at the bottom of the soil so that it doesn't get waterlogged
- Water from the top until the seedlings are established and the soil is wicking effectively then water through the tube



## Soil Amendments and Mulch

Improving the soil with organic matter increases the ability of the soil to hold moisture and nutrients.

- Use compost and soil improvers to build up the soil before you plant it out
- Add clay to sandy soils or gypsum to clay soils to improve the soil structure
- If your soils are water repellent, use a wetting agent
- Apply coarse mulch or woodchips as a thick layer (5-10cm)
- Avoid very dark mulches as these will get too hot in summer and bake your plants
- Keep adding mulch to build the soil over time, retain soil moisture and suppress weeds

## **Other Water Sources**

Install a greywater system and/or a rainwater tank as alternative water supplies.



- Rainwater tanks should be installed with first flush diverters, insect protection and backflow prevention
- Greywater systems are best installed during the building process but there are some retrofitting options for using laundry water and for houses on stumps – ask your plumber or plumbing supply shop
- Greywater needs to be delivered using an approved dripper systems with purple coloured pipes and the pipes should be covered with a thick layer of mulch
- Visit <a href="https://ww2.health.wa.gov.au/Articles/F\_I/Greywater">https://ww2.health.wa.gov.au/Articles/F\_I/Greywater</a> for information on greywater systems and approvals
- Visit <a href="https://ww2.health.wa.gov.au/sitecore/content/Healthy-wa/Articles/U\_Z/Water-tanks-on-your-property">https://ww2.health.wa.gov.au/sitecore/content/Healthy-wa/Articles/U\_Z/Water-tanks-on-your-property</a> for more information on installing a rainwater tank

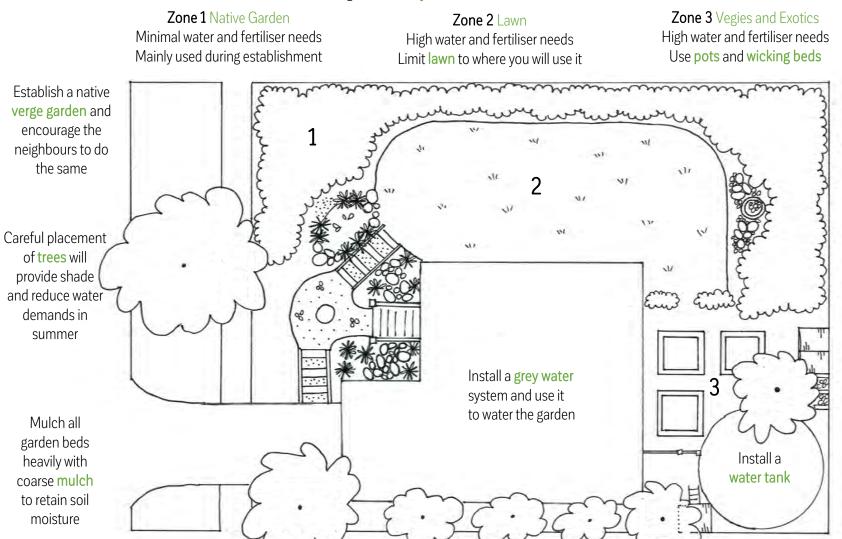


## DESIGNING YOUR OWN WATERWISE GARDEN

## Key things to consider



Divide the garden into hydrozones based on the water and nutrient needs



Consider using deciduous trees on the northern side of your house to provide shade in summer and sun in winter

Select local native plants where possible as they are adapted to the local soils and climate and require minimal maintenance

Improve your soils
with compost,
wetting agents and
soil conditioners to
reduce the need for
extra water and
nutrients