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Wheatbelt waterwise = saltwise : gardening guide

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Rural Towns Program

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WATER CORPORATION

Rural Towns Program

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INTRODUCTION

It is possible to create and enjoy beautiful gardens and parks while ensuring that your town also enjoys a long and healthy life.

As a result of agricultural clearing, many country towns are now feeling the effects of rising groundwater and the salt that it carries. Salinity has been identified as Australia's number one environmental problem. While most people think that salinity means land lost to agriculture, it also poses a serious threat to many country towns.

A report for the Department of Agriculture in 2001 highlighted the need for simple and cost-effective salinity management strategies to be adopted in wheatbelt towns. These included water recycling, revegetation and more efficient water use. This provided the motivation to develop this booklet, with support from the Water Corporation, to help wheatbelt shires, townspeople and those who manage open spaces in towns to 'do their bit' to tackle townsite salinity.

It is possible to create and enjoy beautiful gardens and parks while ensuring that your town also enjoys a long and healthy life. This booklet was compiled following a series of workshops and visits to five wheatbelt towns (Dowerin, Kellerberrin, Merredin, Narrogin and Wagin) and in conjunction with local gardeners, businesses and authorities.

Acacia merinthophora (zig-zag wattle)

Acacia redolens (vanilla wattle)

Many things can be done to manage or prevent salinity in wheatbelt towns, but just as the problem takes years to develop, solutions are not achieved overnight. However, every person living in a wheatbelt town or managing open space has a very important role to play in the fight to halt and reverse the effects of local salinity. This includes those caring for small home gardens to managers of parks and sports grounds, even road verges and landscaping around clubs and public buildings.

As a gardener and land manager, you are literally right on top of the problem, so the plants that you grow and the way that you water them can have an impact on the rate of groundwater rise.

Being WATERWISE recognises that water is a scarce resource and that to waste it is a shame.

Being SALTWISE recognises that wasting water and letting it add to the groundwater is almost criminal.

This booklet is a simple guide to help you become more WATERWISE and SALTWISE while still enjoying the pleasures of a garden.

Plant images were provided by John Colwill.

Eucalyptus caesia (silver princess)

Grevillea 'Honey gem'

Where the water goes

Here are some of the ways that a garden (or lack of one) has an effect on the watertable. Where does your garden fit in? Is there anything you can do to become more WATERWISE and SALTWISE?

A bare block with nothing growing on it

In summer, no water is applied so there is no contribution to the watertable	= WATERWISE
In winter, no vegetation means maximum infiltration and run-off which adds to the rising groundwater	= NOT SALTWISE

A garden, park or sports ground that is watered correctly

(should not have areas of bare ground through which water can be lost to the groundwater)

In summer, depending on the choice of plants, water used is about equal to water applied preventing water seeping down to the groundwater	= WATERWISE & SALTWISE
In winter, plants use most of the rainfall	= partly SALTWISE

A garden, park or sports ground that is watered too much

In summer, water applied is well in excess of needs, meaning that water infiltrates past the root zone	= NOT WATERWISE & NOT SALTWISE
In winter, plants use some of the rainfall	may be WATERWISE partly SALTWISE

A garden or park designed and established following WATERWISE principles and featuring water-efficient plants

In summer, little, if any, extra water is needed. Plants use more water than is applied	= very WATERWISE & very SALTWISE
In winter, plants use most of the natural rainfall	= very WATERWISE & very SALTWISE

Before you buy plants, irrigation equipment and mulches, you need to understand of some of the fundamental interactions between the plants, the soil and the available water.

Soil types

There is remarkable variation to be found in the nature of our soils. They often change greatly within a town, sometimes within a garden. Soils are classified according to the size and mix of the particles they contain:

Clay soils consist of very fine particles that hold a lot of moisture but are slow to drain. When clay dries out it becomes very hard.

Loam soils have medium-sized particles. Loams also hold a lot of moisture but are faster to drain. When loams dry out they can still be worked.

Sand has very large particles that hold relatively little moisture and drain very freely. When sandy soils dry out they are loose and easy to work but often become water repellent or non-wetting.

Most soils are a combination of different-sized particles. They are usually named after the most dominant group. In addition, there may be different soil types at different depths. Where this occurs near the surface they are called duplex soils, e.g. sand over clay. A consequence of this soil type is that water moves rapidly through the sandy surface layer and then slowly through the clay below. If too much water is applied to duplex soils, excess water may sit on top of the sub-surface clay layer. This causes waterlogging, which can severely restrict plant growth and result in plant disease. In this type of soil either choose plants than can tolerate 'wet feet' or build a mound of freer draining soil on the surface and plant into that.

Importantly for the gardener, each soil has its own characteristics that affect the amount of water that needs to be applied and the choice and growth rate of plants.

Soil pH

An important factor is pH, which is a measure of the acidity or alkalinity. A low pH (acid) or high pH (alkaline) soil can retard plant growth, even if just the right amount of water is applied. Extremes of pH can also lock up nutrients that are important for plant growth. Generally, the soil pH should range between 5.5 and 7.5 - with exceptions for some plants. Adding fertiliser, soil conditioners and lime can all change the pH of a soil. Simple DIY pH test kits can be purchased. Some garden centres perform free pH tests.

Improving your soil

No matter whether your garden is clay, loam, sand or a mixture such as a sandy loam, all benefit from having lots of organic matter added to them.

Organic matter can be home-made (compost) or purchased (soil conditioner).

Sheep and other animal manures are an excellent source of organic matter but may also contain high levels of nutrients that may pose a problem for some plants. Animal manures should be aged or composted before mixing in with the soil.

For greatest benefit, with minimum effort, organic matter should be mixed through the top 30 cm of soil prior to planting. There is little advantage to be gained by mixing it deeper.

Grevillea 'Robyn Gordon'

Grevillea thelmanniana (spider-net grevillea)

Adding extra organic matter to **clay:**

- Improves the soil structure making it easier to work and better draining. As a result plants grow with less stress.
- Improves the nutrient-holding capacity and availability so less fertiliser is needed while more is available to the plant.
- Encourages the development of very important microscopic soil life.

Adding extra organic matter to **loam:**

- Improves the water-holding capacity, meaning less water has to be applied while more water is held around the roots and less goes down to the watertable.
- Improves the nutrient-holding capacity and availability so less fertiliser is needed while more is available to the plant.
- Encourages the development of very important microscopic soil life.

Adding extra organic matter to **sand:**

- Greatly improves the water-holding capacity, meaning less water has to be applied to maintain plant growth. More water is held around the roots and less goes down into the watertable.
- Greatly improves the nutrient-holding capacity of the soil. Less fertiliser is needed, and what is applied is more readily available to the plant.
- Encourages the development of very important microscopic soil life.

Adenanthos sericeus (Albany woollybush)

Eucalyptus erythronema (red-flowered mallee)

Non-wetting soil

A problem of many wheatbelt soils, particularly sandy soils, is that when they dry out they repel water or become non-wetting. Water simply pools on the surface before eventually making its way down through one or two spots, while the bulk of the soil remains dry. This means irrigation will be ineffective as water will not be readily available for the plants to use.

Non-wetting soils are a significant problem in lawns where they can lead to brown dry patches developing. (See also *Lawns*.) A regular application of a soil wetting agent in spring is recommended. Always water the wetting agent in immediately and thoroughly. If the first application does not seem to work, apply a second. Soils that are particularly prone to the problem may need a second treatment in summer.

Alyogyne huegelii (lilac hibiscus)

Hakea laurina (pincushion hakea)

Kunzea pulchella (granite kunzea)

Kennedia nigricans (black coral pea)

In nature, plant litter falls to the ground where it is recycled in various ways to become available to plants for new growth. Mulching imitates this process and has several advantages for the garden. Most significantly, good mulch can reduce evaporation loss from the soil surface by as much as 70 per cent.

Mulching is beneficial in many other ways.

- Protects the roots from daily temperature fluctuations.
- Encourages earthworms and soil microbial activity.
- Restricts weed growth. Any weeds that do germinate are easy to remove.
- Prevents wind and water erosion.
- Improves the appearance of the garden area.

Mulches made of organic material also:

- Break down over time and feed the plants.
- Improve the soil organic matter as they break down.

A good mulch allows moisture to percolate through to plant roots, with as little as possible being held by the mulch itself. Choose one that has large, uneven-sized particles that will bond together but still leave large gaps between to allow water to pass through. This mulch acts as a one-way filter, letting water through but minimising evaporative loss from the surface.

Mulching materials

Many different materials can be used as mulch:

- Chipped tree waste, processed garden prunings or similar, are the best. There is no problem with using material from native plants.
- Soft mulches such as lucerne hay, pea straw, seaweed and compost are most beneficial in areas such as the vegetable patch or underneath fruit trees. They generally do not save much water.
- Lawn clippings and sheep manure do not make good mulch. They are best composted.
- Old newspapers can be used under mulch for weed control. However, thick overlapping layers of newspaper may also prevent water penetration.
- Non-organic materials such as crushed brick, stone or gravel are also good. However, these materials do not break down, nor do they contribute to the organic matter in the soil.

Golden rules of mulching

- Do not place mulch directly against the stems or trunks of plants; always leave a space of about 5 cm.
- Maintain the mulch thickness between 5 and 7.5 cm, topping it up when necessary.
- Organic mulches enriched with animal manure are enormously beneficial when applied thickly (as much as 30 cm) around the drip zone of fruit trees. They should be topped up as necessary during spring, summer and autumn to maintain a minimum thickness (after settling) of 15 cm.
- Vegetable gardens should be mulched with 'softer' mulches such as compost, pea, hay or lucerne straw.
- In garden areas mulches should be topped up as necessary, perhaps twice a year in both autumn and spring.
- Mulches should never be raked up, turned over, dug in or disturbed in any way. To do so will damage the fine feeder roots which plants develop in the zone between the mulch and the soil.

Melaleuca fulgens (scarlet honeymyrtle)

Myoporum parvifolium (creeping myoporum)

When designing a new garden, or looking at overhauling your existing garden, some principles should be followed to ensure maximum water efficiency. Not all plants have the same water, fertiliser, soil and space requirements. The following tips will help:

- Keep planted areas dense and consolidated. Scattered plants are more difficult to water efficiently than those in defined areas.
- Make use of windbreaks, pergolas, screens, lattice, shadecloth and vines to shelter the house, outdoor living areas and plants, and reduce evaporation.
- Choose plants that have a low water demand and group plants with similar needs.
- Install a watering system that is both efficient and simple to adjust.

Choose plants that suit the climate

This means choosing plants that can cope with long hot dry summers and cool wet winters, and an occasional frost. These plants are most likely to have originated either in WA, southern Australian States or other places where the climate is similar such as the Mediterranean basin, or the west coasts of South Africa and North America. Recommended plants are listed later in this booklet.

An average garden may contain a range of plants that have their origins in many different parts of the world. Some might come from rainforest environments where light is limited, rain is heavy and frequent and the atmosphere is protected and humid. These plants have not had to develop any means of saving water.

Other plants may come from northern temperate regions where it is cooler and they don't have to cope with high temperatures and low humidity. Yet others might have originated in harsh desert conditions where survival depends on harvesting every single drop of water and storing it for later use.

This broad range of ornamental garden plants can be roughly divided into three groups according to their water needs:

- **One Drop Plants**, the most efficient users of water, only need occasional watering over summer once established. These plants have developed ways to find their own moisture or have the capacity to slow transpiration rates. Perhaps water once every two weeks or longer, in some cases not at all.
- **Two Drop Plants**, less efficient users of water but still reasonably tough that need to be watered once or twice a week in summer.
- **Three Drop Plants**, which use a lot of water and need to be watered every one to two days.

One Drop Plants are the best for a WATERWISE and SALTWISE garden. Once established they need very little, if any, water in summer which means that they are helping to lower the watertable.

Some One and Two Drop Plants are listed in this booklet. A larger collection of commonly grown ornamental plants in WA can be found on the Water Corporation website at **www.watercorporation.com.au**.

Lawns

Traditionally most gardens have a lawn. However, many lawns, particularly those in front of houses and buildings, are not used as playing, walking or parking surfaces. These lawns could easily be replaced with less labour intensive and water-demanding plants.

Through extensive local research we know that there is considerable variation among the lawn grasses on offer in WA.

Warm season grasses

Warm season grasses, such as various forms of couch, buffalo, salt water couch and kikuyu, are more drought-tolerant and require significantly less water than cool season grasses such as ryegrass, Queensland Blue and fescue. They are normally grown from runners or rolls, while cool season grasses are grown from seed.

Couches are preferred for a fine-leaf playing surface. They are hard wearing, often difficult to keep out of garden beds, and need at least five hours of sunshine a day for healthy growth.

Buffalo is a broad-leafed grass with above-ground runners that make it easier to control. Old varieties produce itching in contact with the skin. Newer cultivars, sold as soft buffaloes, are much friendlier. Of the new cultivars 'Sir Walter' in particular shows great promise with its deep green colour and low water demand. Buffalo will tolerate light to medium shade.

Saltene, a form of salt water couch, is a fine-leafed grass selected for adverse conditions. It will grow in poor soil with slightly saline water. Where conditions are good, Saltene can grow too well and may need regular de-thatching.

Kikuyu is a vigorous broad-leafed grass with underground runners that can make it difficult to control. It can also self-seed. It is hard wearing and useful for playing surfaces but difficult to turn into a dense lawn.

All warm season grasses have low growth rates in winter and all can be damaged by severe frosts. Cool season grasses are not recommended as they require lots of water.

Marianthus bicolor (painted marianthus)

Melaleuca incana (grey honeymyrtle)

Comparison of lawn grasses

VARIETY	WATER USE	HEAT TOLERANCE	DROUGHT TOLERANCE
Couch types	Low	Excellent	High
Buffalo	Low	Excellent	High
Saltene	Low	Excellent	High
Kikuyu	Low	Excellent	High
Cool season (not recommended)			
Ryegrass	High	Poor	Fair
Tall fescue	High-Fair	Medium	Fair

Does it have to be lawn?

The main problem with lawns is that, more often than not, they are nothing more than fillers and, more often than not, they are over-watered. Choosing an appropriate warm season grass and watering it correctly will overcome some of the problem. In some situations it may be possible to use alternative plants to create a lawn-like effect.

Dichondra repens is a prostrate native plant with small green kidney-shaped leaves which spreads by runners. It will grow in places that are too shady for grass.

Lippia (*Phylla nodiflora*) can tolerate a wide range of conditions including full sun and alkaline soils. It has small, grey-green leaves and is slow growing but once established is very hardy, drought-tolerant and able to take a reasonable amount of traffic. Lippia produces small flowers on short stems that may attract bees.

Where a lawn is not necessary, it can be replaced with a collection of low growing shrubs or groundcovers. These need less water and maintenance but still contribute to the overall appearance by adding extra seasonal variation and attracting more of the local fauna into the garden. Lawn maintains the openness of the view.

Preparing the soil, choosing low water use plants, planting them in groups and then mulching are all excellent practices which create the potential for a garden to be both WATERWISE and SALTWISE. The final, and most important, factor is to water the garden correctly. For example, a common habit is to apply extra water "just to be safe". If this is a regular occurrence then all the previous effort will have been for nothing.

To be WATERWISE and SALTWISE you have to give your plants only the water that they need and apply it as accurately as possible. Applying water only to lawns and gardens rather than paths is also important.

Brachyscome multifida (cut-leaf daisy)

Banksia baueri (teddy bear banksia)

Pandorea jasminoides (native jasmine)

Pelargonium sp.

Amounts to apply

As most of the feeder roots of plants are in the top 25 to 30 cm of soil, that is where the water needs to be. The amount of water needed to wet to this depth is measured in millimetres of depth applied across the surface and will vary with soil type. The table below is a rough guide to determine how much to put on your plants each time.

SOIL TYPE	WATER NEEDED TO WET TO 30 cm
Sand	7-10 mm
Sandy loam	20-25 mm
Loam	35-40 mm
Clay	30-35 mm

If the water applied is less than the amount indicated, then the soil will not be wet to the full 30 cm. This may limit root development and stress the plants.

If more water is applied than the amount indicated, some of water will go past the plant roots and add to the rising watertable.

Applying that extra water "just to be safe" is not being safe at all. It serves no good purpose. The information in this booklet will help people redefine 'safe' limits.

'Catch cups' can be purchased from hardware stores, nurseries and garden centres. Or use ice cream containers instead. These simple devices make it possible to gauge:

- how evenly water is being applied across a lawn area surface; and
- how long a sprinkler system should be left running to deliver the recommended amount for the soil type.

Water takes longer to soak into heavy soils such as clays than lighter sands. Most sprinkler nozzles have a high output rate that is suited to sandy soils. When used on clay this may result in ponding and/or run-off. Low output nozzles are available from irrigation specialists.

How often?

The **amount of water** that is applied each time does not vary with the time of year or with the type of plants being grown. Whenever the garden, lawn or sports ground is watered, that set amount should be applied. **What varies is how often it is applied.** Frequency will be determined by the soil type, time of year and the water requirements of the plants.

Soil type

Clay and loam soils hold more water so need watering less often than sandy soils.

Time of year

Plants use most water in summer when temperatures are high and humidity low. In winter there is normally enough natural rainfall to supply the reduced water needs. In between, in autumn and spring, watering should be tapered off or gradually increased as appropriate.

What does it all mean?

Your personal experience is the best guide, and combined with considering and adopting new ideas will make your garden more WATERWISE and SALTWISE. Remember, it is better to water less than more. Plants indicate when they are not getting enough water by a general lack of condition or, in extreme cases, by wilting.

The table below can be used to help estimate watering needs. Select the appropriate plant group in the left hand column and follow it across to where it intersects with the soil type column coming down to find a range of numbers. The numbers represent the number of days between watering. For example, Two Drop Plants in sandy soils need water every four to seven days. The lower numbers of the range are for summer and the higher numbers for the shoulder periods in autumn and spring.

Days between watering

PLANT GROUP	CLAY	LOAM	SAND
One Drop Plants	7-50	7-60	7-30
Two Drop Plants	7-10	7-12	4-7
Three Drop Plants	3-5	3-7	2-3

It is very important to adjust watering frequency with the change in season and to suspend watering in the event of summer rain and when winter rains arrive.

These guidelines are for improved soils only, so it is important to consider the treatments mentioned in the previous section to get maximum benefit. Plants for non-improved soils may require more water than listed above. **Any water restrictions over-ride this recommendation.**

Ricinocarpos tuberculatus (wedding bush)

Scaevola albida 'Mauve clusters' (fanflower)

Scaevola 'Purple fanfare'

Bracteantha bracteata (yellow everlasting)

Watering systems

There are many different ways to water plants, which can be grouped by where the water is directed:

- overhead (sprinklers)
- ground level (drippers)
- underground (sub-irrigation).

Traditional methods use many different types of sprinklers, both fixed or portable. A properly designed system, using good quality sprinklers is capable of placing water evenly across a surface. However these systems are still prone to wind drift and loss through evaporation.

Overhead watering of small areas

- Pop-up sprinklers are the most popular. Buy those with high quality nozzles that have matched precipitation rates, i.e. the half-circle sprinkler on the outside puts out half as much water as a full circle in the middle of the lawn.
- Use sprinklers that produce large droplets that are less prone to wind drift.
- Space sprinklers so that the spray from one head reaches the adjacent head, ensuring double overlap.

Overhead watering of larger areas

- Use gear drive sprinklers that can throw larger droplets over greater distances. Gear drive sprinklers have a much lower precipitation rate and much greater accuracy than impact sprinklers.
- Use containers to determine the rate and accuracy of application.
- Have sufficient stations to ensure adequate pressure for every sprinkler.
- Water the lawn area separately from garden beds.

Sub-irrigation

Sub-irrigation is new technology that promises to reduce water use in the garden drastically, especially on lawns. It involves laying a network of parallel pipes about 5 cm below the surface. These pipes have built-in drippers that deliver a regulated flow of water at precise intervals. The pipes are spaced 30 to 50 cm apart allowing even distribution across the entire area. A properly designed system will include good filtration, allow for soil type and any change of level, and drain the pipes once the watering session has finished.

Sub-irrigation gives a very uniform application with no evaporation loss or wind drift. As a result, the amount of water applied can be considerably reduced. Regular maintenance is essential to prevent root intrusion. Beware that pipes can be damaged by forks or other objects driven into the lawn.

Lawn problems

There are several reasons why lawns may develop uneven growth or brown patches. Unfortunately, the general response is to increase the watering which often does nothing but waste water and add to groundwater problems.

When sandy soils dry past a certain point they often become non-wetting. It is a common problem in lawns. Water will soak down in only a few spots while the rest remains dry, leading to patchy growth. Soil wetting agents overcome the problem and ensure that the water soaks in evenly. A regular application in spring is recommended.

Vigorous grasses can accumulate a layer of dead material beneath a green surface. This layer can prevent even water penetration and promote the development of non-wetting soils. Treating with a soil wetting agent will help but the best treatment is to remove the layer of dead material with a de-thatching machine.

African lawn beetle is a pest that feeds on the root systems of grasses causing browning and sometimes death. Most lawns can tolerate a few beetles without any symptoms. In severe cases it may be necessary to use insecticide. Dead patches caused by lawn beetles are irregular in shape.

Regular-shaped patches with clearly defined edges are usually due to fungi (or dogs!). Over-watering encourages fungal growth.

Lawns that were laid on poorly prepared soil often fail to thrive and become patchy in spite of regular fertiliser. A thin layer of compost spread over the surface can give remarkable results.

Garden beds

Garden beds should be watered separately from lawns because their needs are often very different. Beds may be irregular in shape and the plants often large and widely dispersed. Overhead watering is often impractical or wasteful.

Low pressure, micro-irrigation systems are most popular. They are flexible, cheap, easy to install and allow for precise delivery and placement of water close to the root zones of individual plants. Different emitters can be used including a full range of micro-sprays, mini-sprinklers and fixed and variable drippers.

All micro-irrigation systems should begin with a pressure or flow control device. If this is not installed the emitters may not work efficiently and the joints may burst under excess pressure. These vital components are often not on display at irrigation/hardware stores. Be sure to ask for one.

Eremophila nivea (silky eremophila)

Rosmarinus officinalis (rosemary)

Micro-irrigation emitters are very fine and clog easily, so lines to micro-sprays and drippers should incorporate an in-line filter.

Micro-sprays on short uprights are a common method of watering garden areas but are often very wasteful especially when operated at too high a pressure in a windy location.

Micro-sprinklers or multiple outlet emitters that produce larger droplets are preferred.

Long lines of fixed drippers are often used for general garden beds, either as a permanent system or a temporary measure while the plants are being established.

The in-line dripper pipe, mentioned for lawns, may be a better alternative. It can be laid out on the ground weaving past the plants and coiling around those that need more water. It has the advantage of wetting a larger surface area which encourages better root development. Once laid out it can be protected with a covering of mulch.

Watering times

Ideally, water should be applied at a time of day that allows it to have soaked down into the root zone by the time the plant needs it most, in the heat of the day. In sandy soils where penetration is rapid, this means watering early in the morning, between dawn and 9 am. In heavier clay or loam soils the water takes a lot longer to soak in so it can be applied earlier, say from midnight to dawn. In both cases the water is applied at a time when evaporative loss is low. Once the sun comes up any moisture remaining on the surface will be quickly dried up.

Senna artemisioides (silver cassia)

Calothamnus quadrifidus (one-sided bottlebrush)

Water-saving devices

An automatic system should save water compared with hand watering, but will only do so if it has been properly programmed and adjusted according to season.

In addition, some other devices may help save water:

- The simplest is a rain switch that is mounted on the gutter. When it rains the switch prevents the automatic system from operating for a pre-determined period.
- Some controllers have a linked moisture-sensing device that will over-ride the controller when the soil moisture is at or above a set level. These sensors need to be carefully sited and calibrated.
- With hoses and mobile sprinklers, a manual tap timer is highly recommended.
- Programmable, battery-powered controllers can be used to control watering at remote or non-powered sites.
- Rain water should be stored in tanks for later use. Any excess resulting from heavy downpours should be diverted to the communal drainage and recycling system.

Verticordia chrysantha (golden featherflower)

Dryandra polycephala (many-headed dryandra)

Vacant blocks of land in towns, or parts of large blocks, are often cleared and left bare. These areas contribute to the rising groundwater. If some form of garden or vegetation can be established on them, they will improve the aesthetics of the street and help to control groundwater levels.

Use the following prescription:

1. Match species to site.
2. Identify potential vermin problems - rabbits are found within many towns as well as on the outskirts.
3. Identify any compacted layer in the soil - this is most likely to be a vehicle traffic pan at around 25 to 35 cm deep. Break through this with whatever means is available, e.g. spade, post-hole digger, tractor-mounted rabbit ripper etc.
4. Spray out (or remove mechanically) any weeds within 1m of the intended planting site.
5. Plant seedlings once there is adequate soil moisture and when satisfactory weed control has been achieved. Purchase small plants that are less likely to have had restriction to root growth. Plant more than needed to allow for losses.
6. Plant only healthy vigorous seedling material that shows no sign of being pot-bound.
7. Seedlings should be planted so that none of the nursery soil is visible about ground level. All plants should be well firmed in.
8. Inspect seedlings through the spring and remove any late germinating weeds.
9. Mulch after planting to restrict weed growth. Indicate plant locations, if the site is open to traffic.
10. Enjoy watching the plants grow and knowing you have helped the town become more SALTWISE.

If this prescription is followed there should be no requirement for supplementary watering.

Plant quality

A fundamental part of successful gardening lies with being able to recognise superior quality nursery stock. Plants that have become pot-bound or have been poorly transplanted in the nursery will continue to under-perform as long as they are in the ground. Pot-bound plants suffer from a number of problems - from limited capacity to access moisture and fertiliser, through to being more prone to wind throw. The root ball of a pot-bound plant can be pruned to remove the encircling roots - though some species dislike such rough treatment. Rather than struggling with plants that have been compromised in this fashion, inspect the plants in the nursery at the time of purchase and reject those which are not up to standard.

Inspect seedling root systems to avoid plants like this.
(Photo by courtesy Peter White)

We thank those gardeners who so generously allowed us to visit their gardens and take notes. Unfortunately space restrictions do not allow every plant that was seen to be included in this list. It has been restricted to shrubs, trees, groundcovers and a few herbaceous perennials. Annuals, most fruit trees and high water use plants have been omitted.

The best plants for a WATERWISE and SALTWISE garden are those that are either highly recommended (**) or recommended (*), as indicated.

This list includes the most commonly observed plants but is not exhaustive. Many others may be suitable.

The botanical name is included for precision and to allow the user to look up the plant in reference books. In some cases the name refers to a species that may have numerous cultivars.

Common names (where known) have been included but please note in the event of dispute, the botanical name always wins.

Plants are rated for water needs as either One or Two Drop (💧 or 💧💧). Where there is some doubt or where the plant may have a range of cultivars with differing needs it is shown as One to Two Drop.

Plants prone to frost damage (where known) are indicated. The growth habit (form) is indicated by **C** (climber), **GC** (groundcover), **P** (perennial), **S** (shrub) and **T** (tree). Some plants fit into more than one category.

Westringia brevifolia 'Lilac and lace'

Verticordia monadelpha (pink woolly featherflower)

BOTANICAL NAME	COMMON NAME	WATER NEEDS	FROST PRONE	FORM
Acacia spp.	Wattles	💧	N	**GC,S,T**
Fast growing, yellow flowers, attractive foliage*				
Acacia acinacea	Gold dust wattle	💧	N	**GC,S**
Showy flowers, adaptable				
Acacia celastrifolia	Glowing wattle	💧	N	**S**
Medium shrub with contrasting blue-grey foliage and massed yellow flowers June-Aug*				
Acacia drummondii	Drummond's wattle	💧	N	**S**
Rounded shrub with large bright flowers and soft dark green foliage*				
Acacia hemiteles	Tan wattle	💧	N	**S**
Good foliage/flower contrast*				
Acacia howittii	Sticky wattle	💧		**S,T**
Good windbreak and screening; may be susceptible to borers*				
Acacia iteaphylla	Flinders Range wattle	💧	N	**S**
Early flowers, prunable, good windbreak*				
Acacia 'Limelight'	Limelight	💧		**S**
Foliage plant*				
Acacia merinthophera	Zig-zag wattle	💧	N	**S**
See image on page 4. Highly decorative, short-lived (5 yrs)**				
Acacia pulchella	Prickly Moses	💧	N	**S**
Early flowers, short-lived (5 yrs)*				
Acacia redolens	Vanilla wattle	💧	N	**GC,S**
See image on page 4. Variable size and shape, fragrant flowers*				
Acacia saligna	Golden wreath wattle	💧	N	**T**
Susceptible to borers, but good doer				
Acalypha wilkesiana	Fijian firebush	💧-💧💧	Y	**S**
Very colourful foliage, surprisingly tough				
Acmena/Syzygium	Lilly-pilly	💧-💧💧	Y	**S,T**
Large range, mostly foliage plants*				
Adenanthos spp.	Woollybushes	💧	N	**S**
See image on page 9. Sensitive to phosphorus, need regular pruning, short-lived (5 yrs)**				
Agave spp.	Agaves	💧	N	**S**
Hardy succulents, prone to bird damage*				
Agonis flexuosa 'Nana'	Dwarf peppermint	💧-💧💧	Y	**S,T**
Susceptible to thrips*				
Alyogyne hakeifolia	Native hibiscus	💧	N	**S**
Fast growing, short-lived**				
Alyogyne huegelii	Lilac hibiscus	💧	N	**S**
See image on page 10. Fast growing, short-lived**				
Anigozanthos spp.	Kangaroo paws	💧	N	**P**
Wide size range and flower colours*				
Arbutus unedo	Strawberry tree	💧-💧💧	N	**T**
Tough shade tree*				
Artemisia 'Powys Castle'	Bitters, wormwood	💧	N	**S**
Vigorous competitor*				

BOTANICAL NAME	COMMON NAME	WATER NEEDS	FROST PRONE	FORM
Atriplex nummularia	Old man saltbush	💧	N	S
Tolerates heavy saline soil				
Atriplex semibaccata	Creeping saltbush	💧	N	GC
Useful tough groundcover for adverse conditions, most soil*				
Baeckea virgata Nana & Miniature	Baeckea	💧	N	S
Deep green foliage*				
Banksia spp.	Banksias	💧	N	GC,S
Large, bird-attracting flowers, phosphorus-sensitive*				
Banksia baueri	Teddy bear banksia	💧	N	S
See image on page 17. Very large persistent flowers**				
Beaufortia schaueri		💧	N	S
Needs good drainage**				
Billardiera/Marianthus		💧	N	C
Some colourful local species*				
Bossiaea eriocarpa	Common brown pea	💧	N	S
Round shrub with bright yellow-brown flowers and narrow dark green leaves, flowers July-Sept, well drained soil**				
Bougainvillea spectabilis	Bougainvilleas	💧	Y	S
See example on cover. Slow to establish, many cultivars**				
Brachysema celsianum	Swan River pea bush	💧	N	S
Rounded, spreading bush, with distinctive silvery grey foliage. Red flowers over extended period*				
Brachysema latifolium	Broad-leafed brachysema	💧	N	GC
Prostrate, forming dense clumps. Red flower and large green leaves*				
Brachychiton gregorii	Desert kurrajong	💧	N	T
Smaller than flame tree, susceptible to bird damage**				
Brachyscome spp.	Australian daisies	💧	N	P
See image on page 17. Small, long flowering perennials*				
Bracteantha bracteata cvs	Yellow everlasting	💧	N	P
See image on page 20. Large 'everlasting' flowers				
Callistemon spp.	Bottlebrushes	💧	N	S,T
Attractive flowers on easily pruned, tough plants*				
Callistemon phoeniceus	Lesser bottlebrush	💧	N	S
Large spreading bush with bluish-grey foliage; abundant bright red flowers Sept-Dec; good windbreak*				
Callitris preissii	Rottnest pine	💧	N	S,T
Shrubby at first, then a tree; good windbreak*				
Calothamnus gilesii	Netbush, clawflower	💧	N	S
Bird-attracting flowers, needle-like leaves**				
Calothamnus quadrifidus	One-sided bottlebrush	💧	N	S
See image on page 24. Grey-green/green foliage, bird-attracting flowers**				
Calothamnus sanquineus	Blood red netbush	💧	N	S
Stiff foliage, bird-attracting flowers*				
Casuarina obesa	Swamp sheoak	💧	N	T
Tolerates saline soil*				
Ceanothus sp.	Blue pacific	💧-💧💧		S
Needs sandy soil				

BOTANICAL NAME	COMMON NAME	WATER NEEDS	FROST PRONE	FORM
Ceratonia siliqua	Carob	💧	N	**T**
Can be shaped; male and female plants, slow*				
Chamelaucium spp.	Wax flowers	💧	N	**S**
Most need good drainage*				
Choisya ternata	Mock orange	💧💧	N	**S**
Fragrant flowers				
Chorizema cordatum	Heart leaf flame pea	💧	N	**S**
Short-lived but very showy*				
Cistus albidus	Rock rose	💧-💧💧	N	**S**
Open habit, range of flower colours*				
Citharexylum quadrangulare	Fiddlewood	💧💧	Y	**T**
Strongly fragrant flowers				
Coleonema spp.	Diosma	💧-💧💧	N	**S**
Few forms, some burn in summer, others susceptible to bacterial rot				
Conostylis setigera	Bristly cotton heads	💧	N	**GC**
Low rounded tuft to 20 cm; massed yellow flower head above dense clump of strap-like leaves*				
Convolvulus sp.	Blue moon	💧-💧💧	N	**GC**
Compact groundcover**				
Convolvulus cneorum	Convolvulus	💧	N	**GC,S**
Silvery-grey foliage, needs good drainage				
Coprosma spp.	Mirror bushes	💧-💧💧	N	**S**
Many forms, most burn in summer, quick to recover				
Correa spp.	Native fuchsia	💧-💧💧	N	**S**
Many forms, some burn in summer*				
Dampiera wellsiana	Well's dampiera	💧	N	**GC**
Suckers form large patches, blue/purple flowers*				
Darwinea citriodora	Lemon-scented myrtle	💧-💧💧	N	**S**
*				
Dianella revoluta	Flax lily	💧-💧💧	N	**S**
Clumping foliage plants, many cultivars**				
Dietes spp.	African iris	💧	N	**P**
Tough, strap-leaved, clumping and long flowering*				
Dodonea viscosa 'Purpurea'	Purple hop bush	💧	N	**S**
Decorative foliage and fruits*				
Dryandra nivea	Creeping dryandra	💧	N	**S**
Adaptable, prostrate with dark green foliage*				
Dryandra nobilis	Great dryandra	💧	N	**S**
Upright shrub*				
Dryandra polycephala	Many-headed dryandra	💧	N	**S**
See image on page 25. Good cut flowers*				
Duranta repens	Sheen's gold, giesha girl	💧-💧💧	N	**S**
Range of size, foliage and flower colour, some with decorative fruit*				
Eremaea pauciflora var pauciflora		💧	N	**S**
Rounded spreading shrub, with fine grey-green foliage; orange-yellow flowers July-Dec*				

BOTANICAL NAME	COMMON NAME	WATER NEEDS	FROST PRONE	FORM
Eremophila spp.	Eremophilas			
Tough, bird-friendly and showy				
Eremophila biserata	Prostrate eremophila	💧	N	**GC**
Spreading prostrate creeper, with dark green foliage; heavy soil*				
Eremophila decipiens	Slender eremophila	💧	N	**S**
Very hardy in most soils				
Eremophila 'Kalbarri Carpet'		💧	N	**GC**
Spreading low shrub, bright orange flowers; many flower and leaf colours; spreading silver-grey foliage**				
Eremophila maculata	Spotted eremophila	💧	N	**S**
Upright, with distinctive orange throated flowers for long periods; several forms and colours**				
Eremophila nivea	Silky eremophila	💧	N	**S**
See image on page 23. Suits most soils**				
Eremophila racemosa	Showy eremophila	💧	N	**GC**
Suits most soils**				
Eremophila serpens	Snake eremophila	💧	N	**GC**
Prostrate, ground hugging creeper, discrete greenish flowers among dark foliage, heavy soil*				
Erigeron spp.	Fleabane	💧		**S**
Tough, colourful, self-seeding*				
Eucalyptus spp.	Gum trees			
Tough, bird-friendly and often showy				
Eucalyptus caesia	Silver Princess	💧	N	**T**
See image on page 5. Slender, open, weeping habit**				
Eucalyptus crucis	Southern Cross mallee	💧	N	**T**
Ornamental silver foliage, spreading habit, responds to pruning**				
Eucalyptus eremophila	Sand mallee	💧	N	**T**
Highly ornamental*				
Eucalyptus erythrocorys	Illyarrie	💧	N	**T**
Prefers alkaline soil, showy autumn flowers*				
Eucalyptus erythronema	Red-flowered mallee	💧	Y	**T**
See image on page 9. Highly ornamental, very tough**				
Eucalyptus kruseana	Bookleaf mallee	💧	N	**S,T**
Ornamental foliage on small, often open, tree*				
Eucalyptus loxophleba	York gum	💧	N	**T**
Too large for most gardens but great in parks				
Eucalyptus macrandra	River yate	💧	N	**T**
Small tree, showy long buds and yellow flowers*				
Eucalyptus macrocarpa	Mottlecah	💧	N	**T**
Open habit, large very showy buds and flowers*				
Eucalyptus preissiana	Bell-fruited mallee	💧	N	**S**
Ornamental leaves and flowers, most soils*				
Eucalyptus salmonophloia	Salmon gum	💧	N	**T**
Too large for small areas but great in parks and large gardens				
Eucalyptus torquata	Coral gum	💧	N	**T**
Suits most soils**				

BOTANICAL NAME	COMMON NAME	WATER NEEDS	FROST PRONE	FORM
Eucalyptus youngiana	Dowerin rose	💧	N	**T**
Small open tree with large buds and showy red/yellow flowers*				
Euryops pectinata	Yellow daisy bush	💧-💧💧	Y	**S**
Open nature, long flowering				
Evolvulus 'Sapphire'	Evolvulus	💧	N	**S**
Small shrub				
Feijoa sellowiana	Feijoa guava	💧💧	Y	**S,T**
Needs protection from cold				
Genista 'Yellow Imp'	Broom	💧		**S**
Prone to caterpillar attack*				
Gossypium spp.	Desert rose	💧	N	**S**
Hibiscus-like flowers*				
Grevillea spp.	Grevilleas			
Very wide range, bird-attracting, long flowering				
Grevillea 'Winparra Glow Gem'		💧	N	**S**
**				
Grevillea curviloba		💧	N	**S**
Sprawling shrub, creamy white flowers*				
Grevillea 'Honey Gem'	Honey gem grevillea	💧-💧💧	N	**S**
See image on page 8. Can be shaped into tree, large golden flowers**				
Grevillea hookeriana	Toothbrush grevillea	💧	N	**S**
Several forms and flower colours*				
Grevillea 'Lemon Sprite'		💧		**S**
Often spreading, dense dark green foliage**				
Grevillea obtusifolia		💧	N	**S**
Dense dark green foliage**				
Grevillea olivacea	Olive grevillea	💧	N	**S**
Very tough, range of flower colours**				
Grevillea petrophiloides	Poker grevillea	💧	N	**S**
Prefers reasonable drainage*				
Grevillea 'Poorinda Signet'		💧	N	**S**
Pink flowers in spring on arching growth*				
Grevillea 'Robyn Gordon'	Robyn Gordon grevillea	💧	N	**S**
See image on page 8. Bird-attracting flowers most of year, but may cause skin rash**				
Grevillea 'Scarlet Sprite'		💧	N	**S**
**				
Grevillea 'Superb'		💧	N	**S**
Red, bird-attracting flowers**				
Grevillea thelmanniana	Spider-net grevillea	💧	Y	**GC**
See image on page 8. Several cultivars, prefer good drainage**				
Grewia occidentalis	Grewia	💧💧	N	**S**
Prune after flowering**				
Hakea spp.	Hakeas			
Wide range, bird-attracting, tough shrubs and small trees				

BOTANICAL NAME	COMMON NAME	WATER NEEDS	FROST PRONE	FORM
Hakea coriacea	Pink-spiked hakea	💧	Y	**S**
Showy winter bird-attracting flowers**				
Hakea francisiana	Pink pokers	💧	N	**S**
Showy winter/spring bird-attracting flowers**				
Hakea invaginata		💧	N	**S**
Massed pink flowers**				
Hakea laurina	Pincushion hakea	💧	N	**S,T**
See image on page 10. Highly ornamental**				
Hakea lissocarpa	Honey bush	💧	N	**S**
Dense, prickly shrub with masses of creamy white, sweet-scented flowers; most soils*				
Hakea multilineata		💧	N	**T**
Showy red flowers in winter**				
Hardenbergia monophylla	Hardenbergia	💧-💧💧	N	**C**
Short-lived but vigorous climber with purple flowers in spring*				
Hemiandra pungens	Snakebush	💧	N	**GC**
*				
Hibiscus syriacus	Hibiscus	💧-💧💧	Y	**S**
Smaller blue, purple or white flowers*				
Hibiscus tiliaceus	Cottonwood	💧-💧💧	N	**T**
Colourful foliage form also available*				
Hypocalymma angustifolia	White myrtle	💧	N	**S**
Erect, many-stemmed shrub, flowers open white, changing to deep pink. Prune after flowering*				
Jasminum azoricum	Jasmine	💧-💧💧	Y	**C**
Tough climber, fragrant white flowers*				
Juniperus chinensis 'Keteleeri'	Juniper	💧💧	Y	**S**
Hardy conifer*				
Kennedia nigricans	Black coral pea	💧	N	**C,GC**
See image on page 10. Fast growing, often short-lived climber or groundcover*				
Kennedia prostrata	Running postman	💧	N	**GC**
Vigorous groundcover, with massed red flowers among dark foliage; showy but often short-lived*				
Kunzea baxteri	Baxter's kunzea	💧	N	**S**
Bright red flowers through winter**				
Kunzea pomifera		💧	N	**GC,S**
Low spreading shrub*				
Kunzea pulchella	Granite kunzea	💧	N	**S**
See image on page 10. Green/grey foliage, very showy in flower**				
Lagerstroemia indica	Crepe myrtle	💧-💧💧	N	**S,T**
Semi-deciduous*				
Lavandula sp. and cv	Lavender	💧	N	**S**
Often over-watered, some weed potential				
Leptospermum spp.	NZ tea-tree	💧-💧💧	Y	**S**
Cardwell and Pacific Pearl appear best*				
Leptospermum erubescens	Tea-tree	💧-💧💧	N	**S**
Spreading, multi-stemmed large shrub, with small rounded leaves; responds well to shaping*				

BOTANICAL NAME	COMMON NAME	WATER NEEDS	FROST PRONE	FORM
Leucadendron spp.		💧-💧💧	N	**S,T**
Many phosphorus-sensitive				
Leucophyta brownii	Cushion bush, silver nugget	💧	N	**S**
Silver foliage, short-lived				
Leucospermum spp.	Pincushions	💧-💧💧	N	**S**
Many phosphorus-sensitive				
Ligustrum vulgare	Privet	💧	N	**S**
Foliage plant*				
Lomandra spp.	Mat rush	💧-💧💧	Y	**P**
Tough green clumps of foliage, few cultivars*				
Lonicera spp.	Honeysuckle	💧	N	**C**
Fast growing, fragrant flowers				
Malvaviscus sp.	Turk's cap	💧-💧💧	Y	**S**
Long flowering period**				
Marianthus bicolor	Painted marianthus	💧	N	**S**
See image on page 15. Sprawling shrub with masses of flowers; prefers light shade**				
Melaleuca spp.	Melaleucas			
Very wide range, mostly tough, attractive flowers				
Melaleuca acuminata	Mallee honeymyrtle	💧	N	**S**
Foliage plant**				
Melaleuca cv	Green globe	💧	N	**S**
Foliage plant**				
Melaleuca cv	Revolution green	💧-💧💧	N	**S**
Foliage plant*				
Melaleuca eleuterostachya		💧	N	**S**
Showy flowers, tolerates alkaline soil*				
Melaleuca elliptica	Granite honeymyrtle	💧	N	**S**
Showy flowers**				
Melaleuca fulgens	Scarlet honeymyrtle	💧	N	**S**
See image on page 12. Rounded, open-branched shrub, decorative red/mauve flowers; different colours*				
Melaleuca incana	Grey honeymyrtle	💧	N	**S**
See image on page 15. Foliage plant, dwarf forms available**				
Melaleuca laxiflora		💧	N	**S**
Foliage plant**				
Melaleuca Little Nessie	Scarlet honeymyrtle	💧	N	**S**
Foliage plant**				
Melaleuca steedmanii	Scarlet honeymyrtle	💧	N	**S**
Showy flowers**				
Melaleuca strobophylla	Paperbark	💧-💧💧	N	**S,T**
Dense foliage, white trunk and flowers, tolerates saline soil				
Melaleuca thymifolia	Snow drift	💧	N	**S**
Showy flowers**				
Metrosideros spp.	Pohutukawa	💧-💧💧	N	**S,T**
Large range, foliage and flowers*				

BOTANICAL NAME	COMMON NAME	WATER NEEDS	FROST PRONE	FORM
Murraya paniculata	Orange jessamine	💧	Y	**S**
Good all rounder, also dwarf form*				
Myoporum parvifolium	Creeping myoporum	💧		**GC**
See image on page 12. Tough groundcover, at least two forms**				
Myrsine africana	African box	💧	N	**S**
Foliage plant				
Olea europaea	Olive	💧	N	**T**
Adaptable all-rounder, can invade bushland**				
Patersonia occidentalis	Native iris	💧	N	**GC**
Clumping groundcover, long strap-like leaves and large purple flowers*				
Pandorea jasminoides	Native jasmine	💧	N	**C**
See image on page 17. Several cultivars**				
Pandorea pandorana	Wonga vine	💧	N	**C**
Several cultivars**				
Pelargonium cvs	Pelargonium	💧-💧💧	N	**P**
See image on page 17. Multiple cultivars*				
Photinia spp.		💧	N	**S,T**
Colourful new foliage*				
Pittosporum phylliraeoides	Desert willow	💧	N	**T**
Weeping foliage, suckers when disturbed**				
Plumbago spp.	Plumbago	💧	N	**S**
Several cultivars				
Polygala myrtifolia	Polygala	💧	Y	**S**
Short-lived**				
Prostanthera spp.	Mint bushes	💧	N	**S,T**
Several cultivars				
Protea sp. and cvs	Proteas	💧	N	**S,T**
Large showy flowers				
Punica granatum	Pomegranate	💧	N	**S,T**
Tough, decorative and fruitful, also dwarf form**				
Pyracantha angustifolia	Firethorn	💧	N	**S**
Thorny branches but showy autumn berries				
Raphiolepis indica	Indian hawthorn	💧	N	**S**
Several cultivars*				
Ricinocarpos tuberculatus	Wedding bush	💧	N	**S**
See image on page 20 and cover. Highly ornamental, spreading shrub with massed fragrant white flowers**				
Rosmarinus officinalis	Rosemary	💧	N	**S**
See image on page 23. Several cultivars**				
Russelia equisetiformis	Coral plant	💧	N	**S**
Forms large mounds*				
Santolina chamaecyparissus	Cotton lavender	💧	N	**S**
Silver-grey foliage*				
Sapium sebiferum	Chinese tallow	💧	N	**T**
Useful shade and autumn colour*				

BOTANICAL NAME	COMMON NAME	WATER NEEDS	FROST PRONE	FORM
Scaevola 'Mauve Clusters'	Fan flower	💧	N	GC
See image on page 20. Suckering, mounding plant, long flowering**				
Scaevola 'Purple Fanfare'	Fan flower	💧	N	GC
See image on page 20. Bright flowers over long period**				
Schinus molle	Peppercorn tree	💧	Y	T
Very tough, competitive root system				
Senna artemisioides	Silver cassia	💧	N	S
See image on page 24. Short-lived (5-7 yrs)**				
Solanum rantonettii	Blue potato bush	💧	N	S
Several cultivars, grown as standard*				
Solanum wendlandii	Potato creeper	💧-💧💧	N	C
Hardy once established				
Sollya heterophylla	WA bluebell	💧	N	C,S
Small shrub/climber, with massed blue flowers and long purplish fruit; also pink and white flowers*				
Strelitzia reginae	Bird of paradise	💧	N	P
Large clumps, two forms				
Syzygium/Acmena	Lilly-pilly	💧-💧💧	N	S,T
Large range of decorative foliage plants*				
Tecomaria x smithii	Tecoma	💧	N	S
Hardy once established				
Thryptomene 'Payne's hybrid'		💧	N	S
Responds well to shaping**				
Thuja orientalis Aurea Nana	Golden biota	💧-💧💧	N	S
Hardy colourful conifer*				
Ulmus parvifolium	Chinese elm	💧-💧💧	N	T
Spreading, semi-deciduous tree with strong roots				
Verticordia chrysantha	Golden featherflower	💧	N	S
See image on page 25. Very showy once established**				
Verticordia monadelpha	Featherflower	💧	N	S
See image on page 28. Very showy once established**				
Verticordia nitens	Morrison featherflower	💧	N	S
Very showy once established**				
Viburnum tinus	Laurestinus	💧	N	S
Suits most soils				
Vitex spp.		💧-💧💧	Y	S
Foliage plant				
*Westringia brevifolia**	Westringia	💧	Y	S
See image on page 28. Responds well to shaping**				
Westringia fruticosa	Westringia	💧	N	S
Responds well to shaping, several cultivars**				
Xylomelum angustifoloium	Sandplain woody pear	💧	N	S,T
Showy tree for free-draining soils, phosphorus-sensitive*				
Yucca sp.	Yucca	💧	Y	S
Tough plants, clusters of sword-shaped leaves*				

Books

Australian Plants for Mediterranean Climate Gardens by Roger Elliot.
Rosenberg Publishing.

Gardening Down-under: A Guide to Healthier Soil and Plants by Kevin Handreck.
Published by Landlink Press.

Habitat Garden by Peter Grant.
Published by ABC Books.

Landscape Plants for Western Regions (of America) by Bob Perry.
Published by Land Design Publishing.

The Australian Garden: Designing with Australian Plants by Diana Snape.
Published by Bloomings Books.

The Garden Guru's Guide to Waterwise Gardening by Trevor Cochrane and Neville Passmore.
Published by The Garden Gurus.

The Mediterranean Gardener by Hugo Latymer.
Published by Frances Lincoln.

Waterwise House and Garden: A Guide for Sustainable Living by Allan Windust.
Published by Landlink Press.

Waterwise Parks and Gardens. Local Government Salinity Initiative – Booklet No. 7.
Published by Department of Infrastructure, Planning and Natural Resources, Sydney.

What Garden Pest or Disease is That by Judy McMaugh.
Published by New Holland.

Websites

Department of Agriculture: **www.agric.wa.gov.au**

Kings Park Botanic Gardens website: **www.kpbg.wa.gov.au**

Water Corporation website: **www.watercorporation.com.au**

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Investing in the future by becoming a WATERWISE and SALTWISE gardener is a blue chip investment that will:

- Reduce your water bill
- Cut your fertiliser bill
- Increase the health of your garden.

And most importantly, it will help protect your property investment by giving your town a much more secure future.

There is nothing to lose and everything to gain.

This booklet will get you started.