



Water Wise gardening

Planning a water efficient garden

What is a water efficient garden?

A water efficient garden is designed to cope with South East Queensland's climate and meet your lifestyle needs, without wasting water.

South East Queensland has a subtropical climate of hot humid summers with warm dry winters. Rainfall can be extremely variable between years and months. On average annual rainfall varies from 800mm in western districts to 1800mm in coastal areas.

Brisbane district annual rainfall is approximately 1200mm. Evaporation rates throughout the region vary from 1500mm in coastal areas to 1700mm in western districts. On average rainfall usually exceeds, or is equivalent to, evaporation from January to July while the reverse occurs during the remaining months of the year.

Watering may be required when evaporation exceeds rainfall for extended periods leading to falls in the available soil water levels which limits plant growth and survival. The length of time it takes for available soil water to be reduced depends on two factors:

- daily evaporation rates, which are influenced by temperature, air speed and solar radiation
- the plant available water capacity of your garden soil.

The key objective of any garden design or management practice is to reduce evaporative losses within your garden and maximise the water content of your garden soil. This extends the period your garden can survive on stored moisture, reducing the need for watering.

Good planning and design of your garden, whether new or a renovation, will ensure it is water efficient, practical and enjoyable.

Each section of your garden will have different water requirements according to function, environment and physical characteristics.

Planning your garden

Step 1 – considerations

- What will the area(s) be used for?
- How much space is needed for active recreation, a garden or a patio?
- How much maintenance will be required?

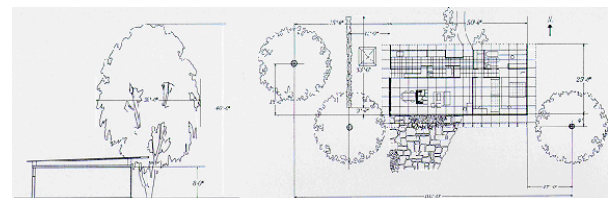
Step 2 – information gathering

The following steps will guide you in gathering information to help develop a plan.

Start with a map

Draw a scaled plan (base map) of the property showing:

- the location of the house
- the orientation of the sun
- other structures such as a pool, pond or paths
- existing vegetation.



Example of a base map.

Analyse site characteristics

Lay a sheet of tracing paper over the base map and detail the following:

- direction of views you want emphasised
- undesirable views you want to screen
- drainage patterns of the property
- changes in soil type.

Incorporate shade into the design

Shading makes your garden more water efficient. Shade from trees/structures reduces water loss and helps create a comfortable living environment. Identify areas where cooling from shade might be of benefit and incorporate into your plan.

Plan areas for different uses

Lay a sheet of tracing paper over the base map and site analysis sheets. Indicate the following area of your landscape:

- public area - visitors see, such as the entrance to the home (typically this receives the most care)
- private area - where most outdoor activity occurs, such as your backyard (this area needs to be functional, attractive and durable)
- service area – working space (typically screened from view and may contain items such as rubbish bins, outdoor equipment, air-conditioning units or a kennel).

Establish water-use zones

Add another sheet of tracing paper over the base map and sketch your desired water-use zones. Several of these zones may be included within an individual landscape:

- High water-use zones are small, highly visible and highly maintained areas of the landscape such as the public area and the area around the patio where plants are watered regularly in the absence of rainfall.
- Moderate water-use zones are the areas with established plants which require watering only when plants show symptoms of moisture stress, such as wilting or changing colour. Typically these are the private areas.



Plan areas for different uses to ensure your design meets your lifestyle needs.



A well designed garden is practical and enjoyable as well as water efficient.

- Low water-use zones are those where the plants receive no water except natural rainfall, for example areas of remnant bushland, well-established trees or natural turf areas.

Step 3 – master plan development

Develop a master plan

The final step is to put all your ideas together in a master plan. This will incorporate your design scheme, water management arrangements and define the various spaces in your plan.

The plan design should be simple to ensure easy maintenance and water use efficiency. Reflecting nature, by reducing tight curves and unnecessary bends, will make maintenance and watering easier.

Be aware of water restrictions in place in your area and water your garden only as restrictions allow. For information on current restrictions in South East Queensland visit www.qwc.qld.gov.au

Consider all these things before choosing specific plants. Your local nursery is the best place to ask about plants that are most water efficient for local conditions.

Other water efficient gardening guides are available on the Department of Natural Resources and Water website www.nrw.qld.gov.au.

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